

Student Name _____

Teacher Name _____

School _____

System _____

ACH



TENNESSEE

Tennessee Comprehensive Assessment Program
Achievement Test ~ Grade 8
Practice Test
Version B



PEARSON

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Introduction

What is the TCAP Achievement Test?

The TCAP Achievement Test is a multiple-choice test designed to measure student achievement in certain skills in four content areas: Reading/Language Arts, Mathematics, Science, and Social Studies. The questions in this practice test are examples of items used in the actual test.

What are the questions testing?

Questions are written to test student performance in state content standards. The State Content Standards and Performance Indicators were developed by the Tennessee Department of Education. These Standards and Performance Indicators are listed on the State Department of Education Web site at <http://www.state.tn.us/education/curriculum.shtml>.

Who will be tested?

All students in grades 3 through 8 will be tested.

How long will the tests take?

The length of the tests will vary, depending on the grade level. The time limits are generous and allow most students time to finish. Extended time limits only apply to students who are eligible for special or English Language Learner (ELL) accommodations.

How will the tests be scored?

The test answers will be machine scored. Results from the test provide information about how well students performed on the content being tested.

May calculators be used?

Calculators may be used on Part 1 and 2 of the mathematics portions of the TCAP Achievement Test (grades 3–8) as per system policy.

Which test accommodations may be used?

The TCAP Achievement Test may be administered using various procedures that are used during the student's daily educational program. Certain conditions must be met for students to be eligible for Special and ELL accommodations.

What is the purpose of the practice test?

In a classroom learning session, these questions can be used to prepare students for the actual test. Teachers can use the practice test to help familiarize students with the format of test questions and how the actual test will be administered. This practice test can also be used to inform parents of the type of test their children will be taking.

Here are some tips for preparing students for the test.

Remind students to:

Relax: It is normal to be somewhat anxious before the test. Remember that the score is only one of a number of measures of performance.

Listen: Listen to and read the test directions carefully.

Plan Use of Time: First, answer all the questions you are sure about. Do not spend too much time on any one question. If a question seems to take too long, skip it and return to it later if you have extra time.

Pause and Think: If you are not sure how to answer a question, carefully read it again. Rule out answer choices that you know are incorrect and then choose from those that remain.

Reading and Language Arts



Part 1

Directions Read the poem. Then answer Numbers 1 through 8.

Bridges

LeLe brings the chopsticks,
Lars provides the glue,
Bassim twists sheets of newspaper,
And I cut cornhusks into flags
5 that fly on toothpick poles.

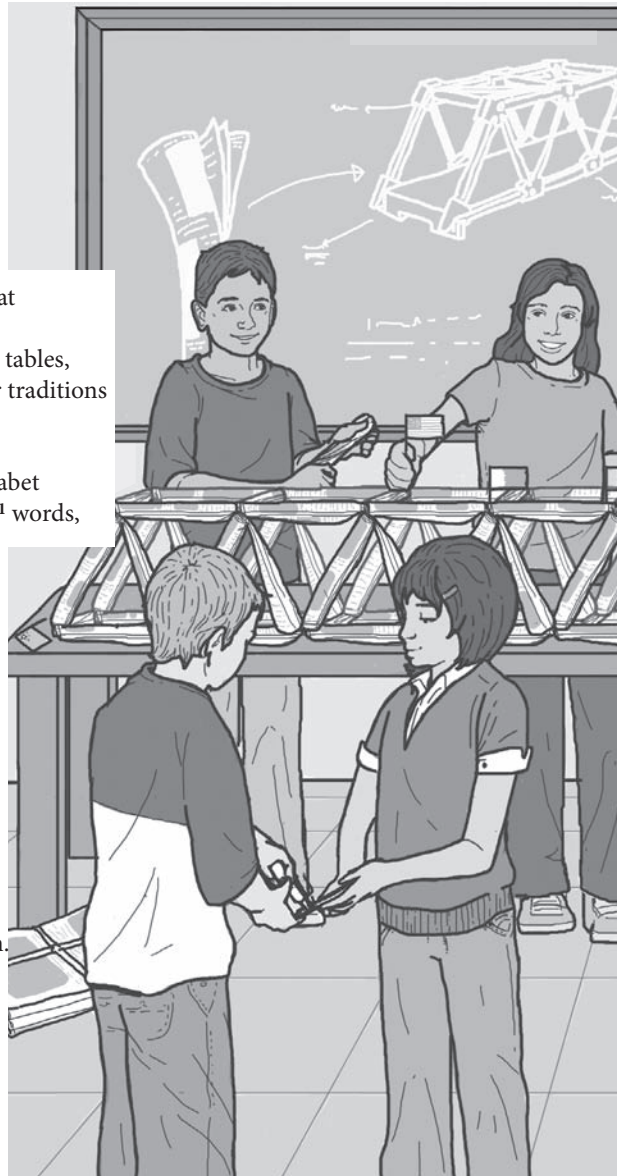
We are building bridges in science class,
Gathering supplies from homes so different that
We seem to be from different planets.
We are not only building a bridge between our tables,
10 But a bridge to span the great gulf between our traditions
Using objects that unite us in a shared cause.

Bassim's Arabic newspaper swirls with an alphabet
I cannot read, unrolling soft waves of scrolling¹ words,
Words his family learned while living in Qatar.
15 We twist the pages into long cables
And bind them into bundles
Around chopstick bones.

LeLe's chopsticks are long and strong
Each printed with a line of good luck
20 In green Chinese characters,
Strong beams wishing our wobbly bridge
A long, strong life.

I shape the bridge over the span
While Lars coats it with homemade glue —
25 Family secret from his grandmother in Sweden.
And as it dries, our bridge is stronger
Than anyone could have imagined.

¹ scrolling: curving



Go On ►

30 I place tamale-wrapper flags,
Representing my Mexican heritage,
Along the edge of the beams,
Symbols of our desire
to span the differences between us,
Like a bridge connects places.

35 Our teacher tests our bridge,
Balancing books —
science, math, history, English —
Across the span.
Our bridge does not break,
And neither do our ties.

1 Read Lines 28 and 29.

*I place tamale-wrapper flags,
Representing my Mexican heritage,*

What does the underlined word mean?

- A** the description of a specific country
- B** the ability for creative thinking
- C** one's cultural background
- D** one's desire for strength

2 After completing the bridge project, the four students will most likely

- F** receive the highest grade in their class for the project.
- G** begin to work more efficiently on their next project.
- H** make another bridge with more durable materials.
- J** appreciate their new friendship with each other.

3 Read this analogy based on the poem.

Newspapers are to cables as chopsticks are to _____.

Complete the analogy.

- A** beams.
- B** poles.
- C** flags.
- D** ties.

Go On ►

4 Which lines from the poem best support the theme of “diversity promotes unity”?

- F** Bassim’s Arabic newspaper swirls with an alphabet
I cannot read, unrolling soft waves of scrolling words,
- G** We twist the pages into long cables
And bind them into bundles
- H** I shape the bridge over the span
While Lars coats it with homemade glue—
- J** Our bridge does not break,
And neither do our ties.

5 The use of first-person point of view allows the reader to clearly understand

- A** one of the participant’s reactions to the importance of the bridge project.
- B** the exact steps for making a bridge without using traditional materials.
- C** each character’s thoughts as he or she contributes an item for the project.
- D** how the bridge project affects the lives of four students involved in its creation.

6 The bridge the students are creating becomes a symbol of

- F** their desire for happy and successful lives.
- G** the relationship that develops between them.
- H** their interest in designing and building structures.
- J** the confidence they feel in their final project.

7 Read Lines 21 and 22.

*Strong beams wishing our wobbly bridge
A long, strong life.*

In these lines, the beams are personified to

- A** compare them to bones.
- B** illustrate the size of the bridge.
- C** exaggerate the role of good luck.
- D** emphasize their purpose.

8 Free verse is used in the poem to

- F** share these students' strategy for building a bridge with the reader.
- G** express the students' feelings about contributions to this project.
- H** mimic the sounds the students' items make during the project.
- J** add rhythm to show how the students' materials blend together.

Go On ►

Directions

Read the website. Then answer Numbers 9 through 15.

Address:

InPursuitofFruit#.com

Dedicated to creating recipes from fruit

Brought to you by Valley Middle School's Fruit Pursuit Club

This Month's Project:
Jam 'n' Jelly

Fruity
Recipes

Delectable Fruit
Recipe of the Month

Join the Fruit
Pursuit Club!

Contact
Us



Club Mission Statement: We promote growing, enjoying, and cooking with seasonal fruits as a means to a healthier lifestyle.

This Month's Project: Jam 'n' Jelly

This month, the club members are learning to make jelly, jam, marmalade, and preserves. Making these delicious treats and canning the jams and preserves is a great way to savor fruit when it is no longer in season. A jar of homemade jelly is a great gift too.

Jam 'n' Jelly Definitions and Facts:

- **Canning** is the process of preserving foods, like jams and jellies, in jars. We use jars, not cans, but the term is still "canning".
- **Jelly** is made from the juice of fruit, and because of this, it tends to be bright and clear. Jelly retains the color of the fruit that is used, though.
- **Jam** is made from whole fruit that has been crushed and cooked. It usually has a thicker consistency than jelly.
- **Marmalade** is a jelly made from citrus fruits, usually oranges. Marmalade typically has very thin slices of the peel suspended it as if hanging by invisible strings.
- **Preserves** are made by cooking fruit with sugar. The finished product will have pieces of soft fruit in it.



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Fruity Recipes

Try our favorite links to other fruity recipes using canned jams and jellies:

Bananas Foster: Cooked bananas flavored with cinnamon and served a la mode (with ice cream)

Blueberry Buckle: Cake with lots of blueberries and a brown-sugar topping

Jam-Tastic Summer Salad: Fruit salad with a dressing that uses jam as an ingredient

Peach Cobbler: Cooked peaches flavored with vanilla and topped with a pastry crust

Address: <http://www.InPursuitofFruit#.com>

Delectable Fruit Recipe of the Month

Since we are making jam and jelly this month, we have found many recipes that use these ingredients. Try this enjoyable recipe for raspberry jam thumbprint cookies!

1. Make our basic cookie dough. [Click here](#) for our simple cookie dough recipe.
2. With a spoon, scoop a glob of dough the size of a small rubber ball.
3. Place the dough onto an ungreased cookie sheet about two inches apart.
4. Once you have the cookies placed on the sheet, use the spoon to flatten them, leaving small indentations in the middle.
5. Place about half a spoonful of raspberry jam in each "thumbprint."
6. Bake at 375 degrees for about 8 minutes.



© HiltDave5/Dreamstime #7329925

Note: These simple and delicious cookies show off the jams and jellies we have made. Raspberry is the classic jam for these, but you can use blueberry preserves, citrus jelly, or even apple butter with a dash of cinnamon.

Join the Fruit Pursuit Club!

Meetings: Every Tuesday at 3:30 P.M.

Where: The middle school kitchen

Faculty Advisor: Mrs. Carmody

We learn about ways to grow and use seasonal fruits for salads, desserts, or even main dishes. Using fruits we have grown has inspired us to learn more about cooking. It's easy and fun!

Joining the club is easy:

1. Fill out a [membership form](#) and submit it online.
2. Come to our regular meetings.

In the fall and spring there are also Saturday meetings for club members. During these meetings, we work in the school garden. We grow peaches, raspberries, rhubarb, and other fruits.

Contact Us

Contact us through e-mail:

thefruitpursuit#1@valleymiddleschool.edu



© Niknikpo/Dreamstime #11048049

Go On ►

9 Read this sentence from the website.

Jam is made from whole fruit that has been crushed and cooked. It usually has a thicker consistency than jelly.

The word consistency refers to how jam

- A** smells.
- B** feels.
- C** heats.
- D** lasts.

10 Travis is a member of the Fruit Pursuit Club. He would like to give a presentation to his home economics class about using organic fruit products. Which primary source can Travis use for his presentation?

- F** an Internet site that sells many varieties of organic fruit
- G** a magazine recipe for fruit salad prepared with only organic fruit
- H** an interview with a doctor who advocates eating organic fruit
- J** a cookbook with a section comparing inorganic and organic fruit

11 According to the website, jelly is bright and clear because

- A** the fruit is strained out of it.
- B** it is made from the juice of the fruit.
- C** water is added to the fruit and sugar.
- D** the fruit is cooked until the consistency is thin.

12 Read this sentence from the website.

Club Mission Statement: We promote growing, enjoying, and cooking with seasonal fruits as a means to a healthier lifestyle.

What persuasive device does the author use in this sentence?

- F** testimonial
- G** plain folks
- H** loaded words
- J** bandwagon

13 What question is not answered by reading the website?

- A** How long should the thumbprint cookies bake?
- B** What kind of topping is used for blueberry buckle?
- C** How long will canned fruits remain edible?
- D** What kinds of fruits does the club grow?

14 What information will the reader find under the heading “This Month’s Project: Jam ’n’ Jelly”?

- F** the definition of marmalade
- G** recipes that use jam or jelly as the main ingredient
- H** a link to a cookie dough recipe
- J** detailed processes for making jam and jelly

Go On ►

15 According to the cookie recipe, the dough should be flattened with the spoon after it

- A** has jam added.
- B** begins to bake.
- C** is placed on the cookie sheet.
- D** has been in the oven for eight minutes.

Directions

William wrote this report. It may contain mistakes. Read the report and answer Numbers 16 through 30.

It's a Secret!

- 1 During the American Revolution (1775–1783), secrecy was important to the safety of both the British and the American soldiers. In order to maintain this safety, these groups used secret messages to relay information. This was an essential strategy for all involved. These messages often included orders for a person or group of soldiers. Some messages had warnings about the enemy's plans, while other messages revealed a troop's location. Because each side wanted to find an advantage over the other, they both used creative ways to hide their words and their secrets.
- 2 One of the American agents methods involved invisible ink. A person would write what looked like a normal, friendly letter. Then he or she would write a secret message on the letter using a special ink, which was often lemon juice. The juice would dry and could not be seen. The person who received the letter would know whether it contained a secret message. If enemy soldiers were to intercept the letter, they would not notice anything unusual. The receiver would hold the letter over a candle. The heat from the candle would darken the acid in the lemon juice, and then the secret message could be read. George Washington found this process useful, and using invisible ink became a common practice.
- 3 The British, on the other hand, employed another way of sending secrets in an ordinary-looking letter. Sir Henry Clinton was a British cryptographer, a person who encoded and decoded secrets in clever ways. He composed secret messages in letters using a mask system. Clinton wrote letters that looked like ordinary correspondence and sent them to the recipient. Then he sent a second sheet of paper with holes cut in strategic places. This piece of paper was called the mask. When the mask was placed on top of the letter, only the words of the secret message were visible. The remaining words were hidden by the mask. For centuries, people have been trying to think up ways to fool their enemies. Allies used these letters to transmit information secretly to each other. The letter and the mask were delivered separately to prevent enemies from discovering the secret message.
- 4 Both the Americans and the British benefited from secret messages. Leaders talked about actions and good decisions by carefully hiding important information. However, people may never truly understand the impact of these clever messages. After all, it's a secret!

16 Who would most likely be interested in reading this report?

- F** a student researching the American Revolution
- G** a person learning about communication methods
- H** a professor interested in British history
- J** a teacher studying a new code system

17 Read this sentence from Paragraph 2.

One of the American agents methods involved invisible ink.

Which is the correct way to write the underlined word?

- A** agent's
- B** agents'
- C** agents's
- D** correct as is

18 The author's purpose for writing this report is to

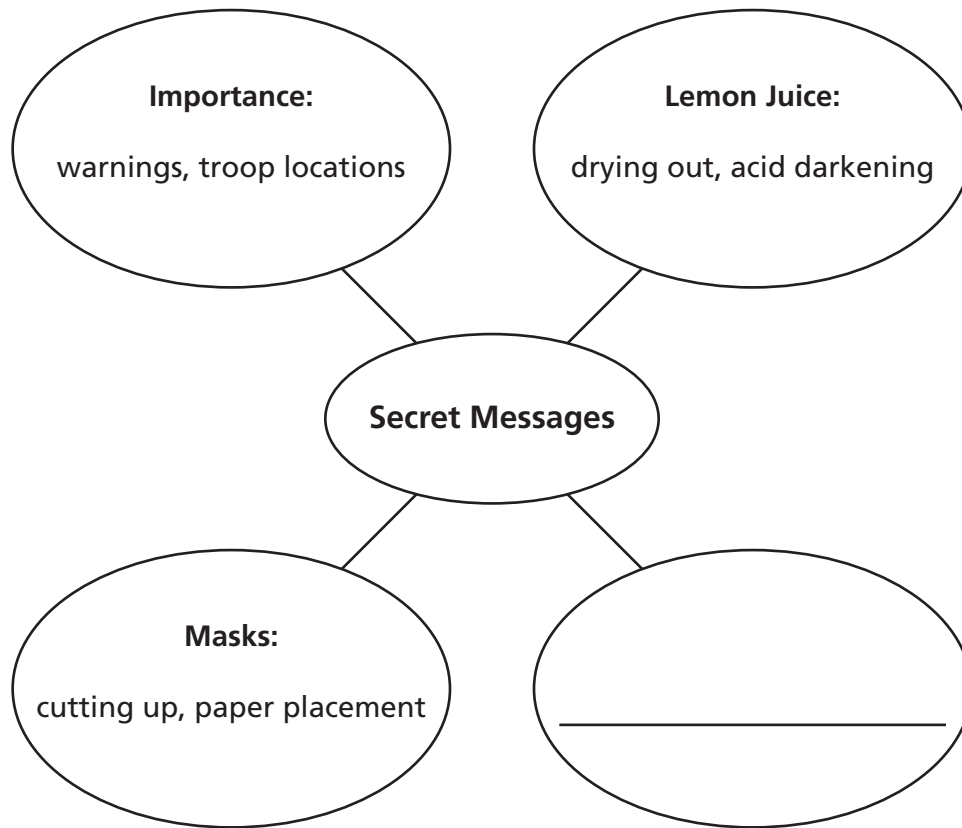
- F** entertain readers with a narrative about British spies.
- G** show readers why Americans wrote letters to soldiers.
- H** inform readers about writing secret messages in the past.
- J** persuade readers to try communicating in secret codes.

19 Which would be the best alternate title for this report?

- A** A New Method of Sending Information
- B** Sir Henry Clinton Was a British Cryptographer
- C** The Most Effective Way to Conceal Messages
- D** Concealed Messages During the American Revolution

20 Which mode of writing best describes this report?

- F** descriptive and narrative
- G** persuasive and narrative
- H** descriptive and technical
- J** persuasive and technical



Which is the best topic for the blank lines?

- A** Allies: friends, associates
- B** Traveling: horseback, train
- C** Spies: communication, confidential
- D** Decoding: candles, extracting messages

22 Which sentence from the report is the thesis statement?

- F** Some messages had warnings about the enemy's plans, while other messages revealed a troop's location.
- G** Because each side wanted to find an advantage over the other side, they both used creative ways to hide their words and their secrets.
- H** The British, on the other hand, employed another way of sending secrets in an ordinary-looking letter.
- J** George Washington found this process useful, and using invisible ink became a common practice.

23 Read these sentences from Paragraph 2.

The person who received the letter would know whether it contained a secret message. _____, if enemy soldiers were to intercept the letter, they would not notice anything unusual.

Choose the transition that belongs in the blank.

- A** Because
- B** However
- C** After all
- D** In addition

24 Which sentence best supports the ideas in Paragraph 2?

- F** Writing secret messages was a very unique idea.
- G** Friendly letters were often written during this time period.
- H** The secret message was often written between the lines on the letter.
- J** The most exciting part of the method was revealing the hidden answers.

Go On ►

25 Which sentence from Paragraph 3 is unnecessary?

- A** Sir Henry Clinton was a British cryptographer, a person who encoded and decoded secrets in clever ways.
- B** Clinton wrote letters that looked like ordinary correspondence and sent them to the recipient.
- C** When the mask was placed on top of the letter, only the words of the secret message were visible.
- D** For centuries, people have been trying to think up ways to fool their enemies.

26 Read this sentence from Paragraph 4.

Leaders talked about actions and good decisions by carefully hiding important information.

Which is the best way to make this sentence stronger and more vivid?

- F** Leaders discussed important actions and crucial decisions by skillfully concealing vital information.
- G** Leaders chose good actions and decisions by particularly hiding the very important information.
- H** Our noble leaders discussed excellent actions as well as pretty good decisions by carefully hiding the very important information.
- J** The leaders talked about all the good actions and decisions through carefully hiding the most important information.

27 Which drawing would be the best illustration to add to this report?

- A** soldiers writing hidden messages
- B** a hidden message as seen through a mask
- C** groups of soldiers reading letters
- D** a special place to hide a letter

28 William decided to write a report about secrecy during WWI. Choose the most focused research topic.

- F** hidden codes in radio transmissions during WWI
- G** concealment in abundance during WWI
- H** mysterious happenings during WWI
- J** unknown events during WWI

29 Read the notes William wrote about Sir Henry Clinton.

Sir Henry Clinton

- I. Hid codes in letters*
- II. Utilized the mask system*
- III. Had some interesting characteristics*
- IV. Made use of separate letter deliveries*

Which note is unrelated and should be omitted?

- A** I
- B** II
- C** III
- D** IV

30 William is presenting a report on invisible ink to his science class. Which visual image would be the best for him to use during his presentation?

- F** a demonstration of how the process works by writing and then revealing a secret message
- G** a virtual tour from a museum display that features messages from the American Revolution
- H** portraits of famous people who used this process for messages during the Revolutionary War
- J** videos of an expert cryptographer explaining how to write messages with this method

Go On ►

Directions

Read this passage. Then answer Numbers 31 through 39.

Not Everything That Counts

- 1 James swiped the paintbrush across his canvas in a single ebony arc before grabbing another brush and dabbing sharp crimson paint splashes onto the scene in front of him. “Yes,” he thought. “It’s almost finished.” James had been busily working for the past week to replicate the photograph that hung on the wall behind Mr. Edgar’s desk of a Spanish courtyard. Mr. Edgar had spoken to James’s class frequently about the enjoyment he felt while in his early twenties spending hours in that courtyard painting the people of Barcelona. That was before he had decided to become an art teacher.



- 2 Shortly before the dismissal bell rang, Mr. Edgar interrupted the silence with an announcement: “Consider your masterpieces officially finished. The deadline to submit your entries for the Pima County Art Competition is tomorrow, so line up your canvases over here, and I’ll deliver them proudly.”
- 3 Rushing into action, the class began rapidly moving canvases across the room, folding up wooden easels, sealing paint tubes, washing paintbrushes and quickly putting all the art supplies into the storage closet. James, however, didn’t move. In fact, he didn’t even lift his paintbrush from the canvas. “I haven’t finished; I need more time,” he pleaded.
- 4 “That’s what Michelangelo said,” Mr. Edgar joked, readily smiling at James. “Never enough time—it’s the artist’s constant frustration. However, deadlines are deadlines.”
- 5 “This painting must be *perfect*, whether it’s a masterpiece or not,” said James.
- 6 No doubt about it, James wanted to win, but he hadn’t even started the most significant part. It required vivid details from the photograph his art teacher had treasured for so many years. That scene was the painting James yearned to create: *Memories of Barcelona*.

- 7 Grudgingly, James had just begun washing his paintbrushes in the sink when the bell rang. Students rushed to the cafeteria for lunch. Certainly he wanted to win “Best in Show” again, but it was essential that the painting conveyed James’s message of gratitude to his art teacher. The painting would be a thank you for Mr. Edgar’s encouragement because his art teacher’s reassurance had given James confidence and inspired him to perfect his talent.
- 8 On his way to the cafeteria, James passed the science lab and saw Mrs. Damon hunched over a microscope. She glanced up and greeted James immediately. “Are you ready for our field trip?” she inquired.
- 9 James didn’t respond, which prompted Mrs. Damon to ask, “James, is something bothering you?”
- 10 For James, Mrs. Damon’s simple question opened the floodgates. “The art competition deadline is today. Everybody thinks my painting is great, but I know that it’s incomplete. Mr. Edgar retires next month, and I want to give him a gift so he will understand that he influenced my decision to develop my talent for painting. I need more time to perfect my work.”
- 11 Mrs. Damon faced James squarely. “Time can create dilemmas, James. Figuring out where to find time is the trick.” Mrs. Damon pointed toward the framed quotation from Albert Einstein hanging on the wall: “Not everything that counts can be counted, and not everything that can be counted counts.”
- 12 “Einstein knew,” she said. “You have to decide what matters most. Only then can you make a sound decision about how to solve your problem.” At that moment the bell rang, and the room was suddenly crowded with students impatiently ready for the field trip.
- 13 Throughout the bus ride, James pondered his dilemma. “Should I settle for a painting good enough to win or create a painting great enough for Mr. Edgar? What’s more important? Pleasing myself or pleasing Mr. Edgar?”
- 14 When the students stepped off the bus, James’s eyes widened in surprise. Next to the monument stood an agave cactus with a single thin stalk that towered fifteen feet high. Adorning the top of the stalk was a lone white flower.
- 15 “An agave lives about twenty years before blooming,” Mrs. Damon explained. “You are witnessing the only flower it will ever have.” She paused. “What do you think Einstein would have said about that?”
- 16 James imagined the entire class silently reciting Mrs. Damon’s favorite words: “Not everything that counts can be counted, and not everything that can be counted counts.”
- 17 When no one responded readily, Mrs. Damon answered her own question. “Einstein might have said that time is well spent if you use it for something that matters. So the twenty years the cactus needed to produce the flower was a meaningful use of time—for the cactus.”
- 18 Just then, a tiny grayish-brown cactus wren perched on the agave’s stalk for a few seconds before glancing both ways and flitting off. “What do you think matters for a cactus wren?” Mrs. Damon questioned.
- 19 James stared at the spot where the cactus wren had paused. Suddenly, the answer to his problem seemed clear: “It depends on what matters most to you.”

- 20 He answered the question aloud. “What matters for the cactus wren isn’t the same as what matters for the agave cactus. I mean, the wren is tiny compared to the giant agave. Additionally, the wren’s entire life is only a moment in the lifespan of the agave cactus. While the wren has to move quickly from place to place to thrive, the agave must sit and wait.”
- 21 Mrs. Damon replied. “Very good observation. What matters would be very different for each.”
- 22 During the ride back to school, Mrs. Damon startled James by leaning around her seat and asking, “So, James, what did you learn today?”
- 23 James smiled broadly at Mrs. Damon. “Learn? Let me see. Was Einstein the one who said, ‘Better late than never’?”
- 24 Mrs. Damon smiled back. “No, but I suppose you’ve decided what matters the most for you.”
- 25 The next morning, James arrived at school thirty minutes early to wait for Mr. Edgar. James quickly stood to greet him as he approached the door. “Mr. Edgar, I must withdraw my painting from the competition.”
- 26 Mr. Edgar nodded. “Certainly, James. I won’t ask your reason, but you know it’s a terrific painting, don’t you? You have a good chance of winning.”
- 27 “Yes sir,” James replied, beaming because he knew what Mr. Edgar didn’t know. “But, sometimes not everything that counts *can* be counted.”

31 Read this sentence from Paragraph 1.

James had been busily working for the past week to replicate the photograph that hung on the wall behind Mr. Edgar’s desk of a Spanish courtyard.

What is the meaning of the underlined word in the sentence above?

- A** expand on
- B** improve upon
- C** make a copy of
- D** create substitute for

32 Read this excerpt from Paragraph 12 of the passage.

“Einstein knew,” she said. “You have to decide what matters most. Only then can you make a sound decision about how to solve your problem.”

Which word is a synonym for the underlined word in this excerpt?

- F** believable
- G** healthy
- H** secure
- J** wise

33 Read this sentence from Paragraph 7.

The painting would be a thank you for Mr. Edgar’s encouragement because his art teacher’s reassurance had given James confidence and inspired him to perfect his talent.

Choose the sentence that uses the same meaning of the underlined word.

- A** Darrell found that with the right combination of work and creativity, he gave the perfect presentation.
- B** Sasha knows that with practice she will perfect her skill and speed while playing basketball.
- C** The funny lyrics that Rhonesha added to the song made it the perfect gift for congratulating Enrique.
- D** The clouds Ann decided to paint for her art exhibition seemed to be so perfect until she began trying to match their colors.

Go On ►

34 At first, James was going to enter the painting into the contest because

- F** he wanted to win the competition again.
- G** many of his teachers expected him to win.
- H** the contest was a requirement of his art class.
- J** many of his classmates were entering the contest.

35 The reader can conclude that Mrs. Damon wants to encourage her students to

- A** think on their own.
- B** attend more class trips.
- C** conduct scientific experiments.
- D** study another famous scientist.

36 Which is the main idea of the passage?

- F** Getting involved in school activities is important.
- G** Learning about artistic techniques is essential.
- H** Determining the importance of something differs according to each individual.
- J** Completing school projects on time is important for personal success.

37 Read these sentences from Paragraph 19.

James stared at the spot where the cactus wren had paused. Suddenly, the answer to his problem seemed clear: “It depends on what matters most to you.”

Which plot element occurs in these sentences?

- A** rising action
- B** climax
- C** falling action
- D** resolution

38 Which dilemma is shared by both Michelangelo and James?

- F** Both questioned whether the product was worth all of the effort.
- G** Both pursued unrealistic goals that were ultimately unreachable.
- H** Both struggled to produce the best product under time restraints.
- J** Both allowed the demands of daily life to interfere with end results.

39 How would the passage be different if it was written from Mr. Edgar’s point of view?

- A** Discussing the competition rules would be emphasized.
- B** Predicting the ending of the passage would be much easier.
- C** The reader would be unaware of Mr. Edgar’s opinions of the courtyard painting.
- D** The reader would be unaware of James’s motives for withdrawing from the contest.

Go On ►

Directions Read and answer Numbers 40 through 42.

40 Choose the sentence that uses an appositive phrase correctly.

- F** My friend, the smartest person in English class, is helping me study for the test.
- G** In the downtown area, there is an increase in parking spaces for shoppers.
- H** My sister and I get along extremely well, in spite of the differences between us.
- J** Sometimes all of us, even I, wonder if there will be enough time to finish our work.

41 Which sentence uses correct pronoun-antecedent agreement?

- A** Riley knew the best path, but the other hikers would not follow them.
- B** The rules of the committee allow its members to miss one meeting per year.
- C** Jenna worked so hard to solve the problem because it personally had much to lose.
- D** Some students from the basketball team were unable to open the door, so he missed practice.

42 Which sentence is written incorrectly?

- F** Looking up the word *home* in several dictionaries was revealing.
- G** Finding a first edition of Whitman's *Leaves of Grass* was thrilling.
- H** *Figure 8* in the instruction guide provides the most valuable step.
- J** Harold enjoys reading the writings of W. Somerset Maugham.

STOP 

**DO NOT
MARK
ON THIS
PAGE**

Part 2

Directions

Read the story and the poem. Then answer Numbers 43 through 52.

Mother Hen

- 1 “*Vivace*? What did that mean?” Peter wondered.
- 2 Often, when visiting his grandparents’ farm, Peter felt like he was in a foreign country. This was one of those times. Grandpa Bruno had been explaining how to release the dairy cattle into the pasture now that spring had finally arrived. Handing Peter a roll of orange plastic tape, Grandpa said, “Tie these flags on the fences every twenty feet or so. The cows will not even see the fences without these flags. The cows are so . . . *vivace* in the spring!” He snapped his fingers.
- 3 Grandpa had pronounced the word vee-VAH-chay. Peter vowed to look it up later that night.
- 4 This was not the first time Peter needed his Italian dictionary while visiting his grandparents. Just the other day, Grandpa Bruno had started laughing while Peter transferred the chicks, which had outgrown their small pen, into the barnyard.
- 5 “They won’t let me move them!” Peter exclaimed, exasperated because he didn’t know what to do. “They keep running away from me.”
- 6 “*A ogni uccello il suo nido è bello*,” Grandpa said, chuckling.
- 7 Peter liked the sound of Italian, but he couldn’t understand it well. When Peter looked confused, Grandpa translated.
- 8 “That means ‘each bird believes its own nest is beautiful.’ You remind me of when I was your age, growing up in Italy. I took care of the baby chicks too. One cold night, I discovered that the lights that kept them warm had stopped working. Well, I had to keep them warm, so I picked up a very deep, old basket and two blankets. I used one blanket to line the basket and the other to cover the chicks to keep them warm. The basket provided a cozy and secure nest that didn’t allow the chicks to escape,” Grandpa said.



9 “Did it work?” Peter asked.

10 “Oh yes, it worked, but at first, they were like these chicks, and they wanted to stay in their old, cold nest. Nothing I tried worked. Then I thought, ‘a mother hen does not chase the chicks — they come to her for warmth.’ I held my hand out and waited for the chicks to come to me. I had to learn patience. When I put them in the basket and brought them into the kitchen, they got warm and calmed down. How my parents laughed at me! They called me ‘mother hen’ because the chicks did not want to leave my nest even after the lights were fixed!”

11 Peter thought of the story later as he walked along the fence with the spool of orange tape. He certainly didn’t want the cattle to show him what *vivace* meant, since that didn’t sound good. So every twenty feet he stopped, tore off a half foot of tape, and tied it to the fence.

12 When the gate to the pasture was opened, the cattle gently loped through it. Within moments, however, the remaining cattle began barreling through the tall grass, heading directly toward the wire fence. Dust was everywhere! The memory of Grandpa saying “*vivace*” flashed through Peter’s mind like lightning! The cows were *vivace*, Peter thought — lively, frisky, and wild. It appeared that the cattle had showed him what the word meant. Peter watched in amazement. Where he had put up the orange flags, the cows moved away from the fence.

13 Suddenly three cows ran quickly toward the part of the fence where flags had yet to be placed. The bovines bulldozed through it, snapping the wire fence as if it had been a mere thread.

14 Peter ran toward the cows, but they charged even farther into the plowed field beyond the pasture. He circled around the cows, hoping they would go back through the fence, but they were in a larger field now and ignored the gap they had made.

15 Peter needed a plan. Grandpa was too far away to help, and Peter could not force the cows back through the gap in the fence by himself. Then Peter remembered the story about the chicks. Grandpa had said, “A mother hen does not chase the chicks — they come to her for warmth.” Instead of chasing the cows, Peter decided to wait like a mother hen and let the “chicks” approach him.

Go On ►

16 It made perfect sense. After all, the cows were excited to start their spring grazing and eat the bounteous, green grass in the pasture. Peter saw the main herd calmly grazing on the tall grass in the pasture. In contrast, the three escapees stood on plowed ground where there was no food.

17 “C’mon,” Peter coaxed. He climbed up on the fence and sat there waiting, trying to be patient. Eventually, the three cows came closer. Peter thought about moving behind them to prevent their escape, but he remained quiet. The cows wanted to be in the pasture as much as he wanted them to be there. ‘This pasture is the better nest,’ he thought, so he waited.



18 For about ten minutes, the escaped cows circled the gap in the fence like water slowly circling a drain. Finally, the three strolled through the gap and settled down to eat like the other cows.

19 It took Peter half an hour to fix the fence as best as he could. Afterward, he headed back to the barn. When he arrived there, Grandpa greeted him.

20 “How were the cows?” Grandpa asked.

21 Sometimes Peter thought Italian was the perfect language! He vowed to learn Italian from Grandpa. There was only one word to describe the cows. Peter grinned and said, “Vivace, Grandpa. Definitely vivace.”

A China Teacup

My Grandmother Gave Me

Today the teacup sits on my shelf,
Dreams by itself,
Reveries¹ of a set for eight
To which it once belonged.
5 Now it remembers and waits alone.

The others have gone,
One by one,
Dropped, chipped, cracked.

Before it was ever mine,
10 I peered at its outer design,
At the city there in blue glaze:
Shops, streets, winding ways,
Even a gate I entered in my mind.

I perched carefully
15 While for me,
Grandmother poured hot tea.

From the cup rose swirling steam,
Which the wind of my breath sent spinning.
I saw clouds, three seagulls,



¹ **Reveries:** daydreams

- 20 And the kites the children flew
From the banks of the blue, blue river.
That cup taught me
To drink tea
Gleefully!
- 25 The cup's scene held more life
Than many places I had been.
Fish swam in whirls, boats curved with currents,
Buyers haggled with merchants,
People rushed, children laughed.
- 30 And Grandmother told
Of days long ago,
From childhood.
- Inside the cup, under a blue tree,
With no hurry, no worry,
35 Two people sat, one old, another young,
At a blue table, under a blue sun,
And tasted tea
Just like the tea Grandmother
Poured for me.
- 40 Grandmother gave me this cup,
And filled it up
With memories of us.

43 Read this sentence from Paragraph 16 of the story.

After all, the cows were excited to start their spring grazing and eat the bounteous, green grass in the pasture.

Based on the root of the underlined word, bounteous indicates that the grass is

- A** temporary.
- B** noticeable.
- C** abundant.
- D** nourishing.

44 If the story were to continue, what would most likely happen next?

- F** Peter would take the cows to another pasture.
- G** Grandpa would teach Peter to speak Italian.
- H** Peter would tell Grandpa about the cows breaking through the fence.
- J** Grandpa would explain to Peter how to properly tie the orange tape.

45 The reader can conclude that Grandpa in the story and Grandmother in the poem are alike because both

- A** enjoy sharing stories with their grandchildren.
- B** taught their grandchildren about hard work.
- C** spent their childhoods in the country.
- D** enjoy spending time outdoors.

Go On ►

46 Complete the analogy based on the poem.

Boat is to current as kite is to _____.

Choose the word that best completes the analogy.

- F** bird
- G** string
- H** wind
- J** soar

47 Read Paragraphs 5 through 7 of the story.

“They won’t let me move them!” Peter exclaimed, exasperated because he didn’t know what to do. “They keep running away from me.”

“A ogni uccello il suo nido è bello,” Grandpa said, chuckling.

Peter liked the sound of Italian, but he couldn’t understand it well. When Peter looked confused, Grandpa translated.

This scene takes place during the

- A** exposition.
- B** climax.
- C** rising action.
- D** resolution.

48 Which kind of conflict does Peter experience in the story?

- F** person vs. self
- G** person vs. person
- H** person vs. technology
- J** person vs. environment

49 Which words help establish the time period of the story as modern day?

- A** plastic, bulldozed, lights
- B** plowed, spool, fence
- C** basket, flags, dictionary
- D** foreign, wire, thread

50 The author wrote the poem to

- F** describe for readers why the teacup is special to the speaker.
- G** provide for readers information about the designs on teacups.
- H** entertain readers with stories about a grandmother and grandchild.
- J** persuade readers to appreciate beauty in the simplest items.

51 The story develops characters through action and dialogue, while the poem develops characters by

- A** telling about their feelings.
- B** relating fictitious events and people.
- C** relying mainly on descriptive details.
- D** focusing on memories of the speaker.

Go On ►

52 In the story, the reader mostly learns about Peter through

- F** what the author says to describe Peter.
- G** what Peter says to his grandfather.
- H** what Peter thinks about receiving advice.
- J** what Peter does to solve the problem with the cows.

Directions

Darrell wrote this rough draft of a report. It contains mistakes. Read the report and answer Numbers 53 through 63.

(1) Like the rest of Disney World, Disney's Animal Kingdom is all about fun. (2) Disney's Animal Kingdom is all about science too!

(3) The Animal Kingdom brings many wondrous creatures to America, as do many zoos. (4) Unlike zoos, the Animal Kingdom does not cage animals. (5) Instead, some of the animals roam approximately ten thousand acres in settings that are as close to their natural habitat as possible. (6) In fact, many of the animals live much as they would in the wild, which makes the park an animal scientist's dream.

(7) Every day at the Animal Kingdom, scientists study the animals that live there. (8) Some of the animals, such as giraffes and elephants, are not native to this continent. (9) Other animals, such as the alligator and white-tailed deer, in America can be found.

(10) Dr. Anne Savage, a conservation biologist, had directed these studies. (11) She oversees numerous animal-monitoring projects. (12) In particular, Dr. Savage and a team of scientists collaborate to study the elephants at the Animal Kingdom.

(13) Dr. Savage is learning more about the sounds elephants make. (14) Scientists attach special microphones onto the elephants to record their sounds. (15) Dr. Savage also watches the elephants closely. (16) She hopes she can match their actions with their sounds then determine what the sounds mean.

(17) One thing Dr. Savage has learned is that elephants use sound to locate other elephants. (18) "This," she says, "allows elephants the opportunity to space themselves appropriately to avoid conflict or move toward a vocalizing elephant in order to investigate what might be of interest."

(19) Much of what the Animal Kingdom scientists learn about elephants and other animals is beneficial to animals around the world. (20) For example what scientists have learned about keeping Disney giraffes healthy can be applied to giraffes in Africa. (21) Indeed, Disney scientists contribute to animal studies in many other countries, such as Uganda, Cameroon, and the Democratic Republic of the Congo.

(22) Dr. Savage comments that being part of the Animal Kingdom and those studies is very rewarding. (23) For kids who love Disney World and animals, it might be great to work there someday. (24) Someone may find this career idea appealing. (25) If so, the courses to study for this job include math, biology, and psychology. (26) Dr. Savage says good speaking and writing skills are needed as well. (27) The scientists who work at the Animal Kingdom enjoy sharing the discoveries they will make with the public. (28) After all, it is one of the happiest places on Earth!

53 Read Sentence 22.

Dr. Savage comments that being part of the Animal Kingdom and those studies is very rewarding.

Which pronoun best replaces the underlined word?

- A** its
- B** their
- C** they're
- D** correct as is

54 Read Sentence 19.

Much of what the Animal Kingdom scientists learn about elephants and other animals is benaficial to animals around the world.

What is the correct way to spell the underlined word in the sentence?

- F** benafishel
- G** benificial
- H** beneficial
- J** correct as is

55 Read Sentence 27.

The scientists who work at the Animal Kingdom enjoy sharing the discoveries they will make with the public.

Choose the correct revision for the underlined words in the sentence.

- A** make
- B** were making
- C** made
- D** will be making

56 Read Sentence 4.

Unlike zoos, the Animal Kingdom does not cage animals.

Choose the sentence that best uses a transitional word or phrase.

- F** Unlike zoos, still, the Animal Kingdom does not cage animals.
- G** Unlike zoos, however, the Animal Kingdom does not cage animals.
- H** Since it is unlike zoos, the Animal Kingdom does not cage animals.
- J** As it is unlike zoos, the Animal Kingdom does not cage animals.

57 Read Sentence 9.

Other animals, such as the alligator and white-tailed deer, in America can be found.

What is the best way to revise this sentence?

- A** In America, other animals can be found, such as the alligator and white-tailed deer.
- B** Other animals in America, such as the alligator and white-tailed deer, can be found.
- C** In America, can be found other animals, such as the alligator and white-tailed deer.
- D** Other animals, such as the alligator and white-tailed deer, can be found in America.

58 Read Sentence 20.

For example what scientists have learned about keeping *Disney giraffes healthy can be applied to giraffes in Africa.*

Choose the correct revision for the underlined words in the sentence.

- F** For example, what scientists have learned about keeping
- G** For example, what scientists have learned, about keeping
- H** For example what scientists have learned, about keeping
- J** For example what scientists, have learned about keeping,

59 Read Sentences 24 and 25.

Someone may find this career idea appealing. If so, the courses to study for this job include math, biology, and psychology.

What is the best way to combine these sentences?

- A** Finding this career idea appealing, the courses for someone to study for this job include math, biology, and psychology.
- B** Someone may find this career idea appealing and if so; the courses to study for this job include math, biology, and psychology.
- C** If someone finds this career idea appealing, the courses to study for this job include math, biology, and psychology.
- D** The courses to study for this job, for someone who may find this career idea appealing, include math, biology, and psychology.

60 Read Sentence 16.

She hopes she can match their actions with their sounds then determine what the sounds mean.

What is the best way to correct this run-on sentence?

- F** She hopes she can match their actions with their sounds; then determine what the sounds mean.
- G** She hopes she can match their actions with their sounds. Then determine what the sounds mean.
- H** She hopes she can match their actions with their sounds and then determine what the sounds mean.
- J** correct as is

61 Read Sentence 10.

Dr. Anne Savage, a conservation biologist, had directed these studies.

Choose the revision of this sentence that uses a gerund phrase.

- A** Dr. Anne Savage, a conservation biologist, has been selected to direct these studies.
- B** Directing these studies is a conservation biologist named Dr. Anne Savage.
- C** A conservation biologist named Dr. Anne Savage is directing these studies.
- D** Chosen to direct these studies is a conservation biologist named Dr. Anne Savage.

62 What is the best title for this report?

- F** Elephants Use Sounds to Speak
- G** Curious Creatures of the Animal Kingdom
- H** Animals Studies around the World
- J** Science Is at Work in Kingdom Known for Fun

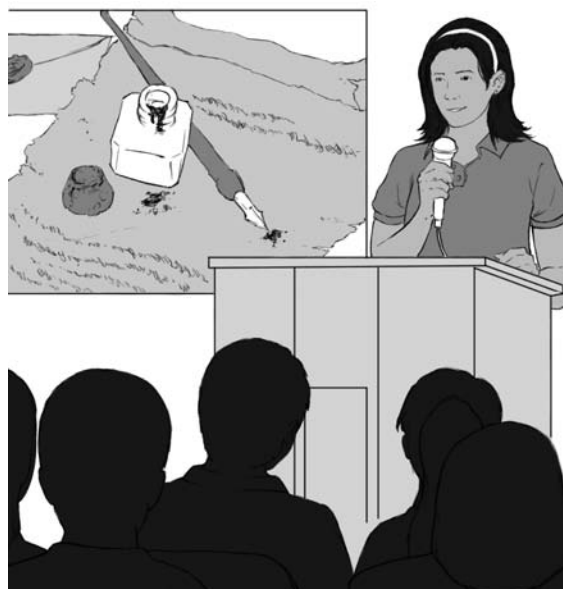
63 People who enjoy this report will most likely have an interest in

- A** Disney World.
- B** animal studies.
- C** African animals.
- D** career opportunities.

Directions

Dawn gave this speech. Read the speech and answer Numbers 64 through 73.

Write a Letter!



- 1 When was the last time you actually wrote a letter? Chances are, it has been awhile. Maybe you have never mailed a letter. United States Postal Service statistics show that the number of letters Americans mail has declined dramatically since 2002. Americans now mail fewer letters despite the fact that the population has grown. The trend in mailing less correspondence is likely to continue.
- 2 There are probably many reasons why people mail fewer letters today than in previous decades. It is my belief, though, that widespread use of e-mail and cheaper long-distance calling make letter writing less appealing. More and more people prefer to communicate instantly rather than completing all the tasks necessary to mail a letter: write the letter by hand, seal it in an envelope, apply a postage stamp, and drop the letter into a mailbox. Using newer forms of communication is certainly easier than writing and mailing a letter. However, I think that always substituting e-mail or phone calls for handwritten letters is a poor choice.
- 3 Consider how we use the newer forms of communication. Both phone calls and e-mail are quick and easy ways to keep in touch with our friends and families. Phone calls are a great way to hear a person's voice immediately and have an instant conversation. The truth about phone conversations is that the majority of them are brief and often not memorable. I think that the most important drawback with phone calls is that we can't save and print them. However, reading our letters again and again can help us feel close to the people who sent them.

Go On ►

- 4 Like phone calls, e-mails provide a fast way to communicate with friends and family. It is easy to write a quick note on the computer. In response, the receiver of the note may type in a few casual comments. The entire exchange may not take more than a minute or two. While sending and receiving e-mail is a speedy way to communicate, it is a poor substitute for meaningful conversation.
- 5 Although letters take longer to write and mail, they are certainly a more memorable way to communicate. Much thought is involved in composing a letter. Once the ideas are organized, the words need to be written down on paper. The effort to put ideas on a page frequently deepens our thinking. Writing a letter is sort of a conversation with ourselves; we learn about our own thoughts as we express them. The person who receives our letter gains insights about our beliefs, rather than simply receiving a short response to an e-mail. People often save handwritten letters for many years. The shelf life¹ of a letter potentially exceeds that of an e-mail.
- 6 As a matter of fact, some letters written by presidents and other world leaders have been carefully preserved. These letters have provided additional details about famous historic events. Letters by Abraham Lincoln, Mark Twain, and Napoleon, among others, have even been published. In some cases, the letters also give us a glimpse into the daily lives of these famous people. Additionally, letters can provide greater understanding of the characters and thoughts of the writers.
- 7 We may think that because we are not famous, others will not be interested in reading our letters. I disagree. My grandmother recently showed me some letters my great-grandfather wrote to his family while he served in World War II. It was fascinating to read them. My grandmother and her brother had told me many stories about their father, and I knew that he was famous for telling very funny jokes. Through reading his letters, though, I began to realize that he was also a thoughtful man who missed his family very much while he was away from home. My great-grandfather was not famous, but because his letters were saved, new generations of my family can learn about him. Letters are wonderful treasures that allow a reader to gain new appreciation for the person who wrote them.
- 8 Although phone calls and e-mails are important forms of communication, I believe that we should all take the time to master the skill of writing a good letter. Then we need to make a habit of writing letters — often. True, writing a letter does take more time than typing a quick e-mail or picking up the telephone, but that is the benefit of a letter. By taking more time to compose our thoughts, we become more thoughtful. In doing so, we create more than just a note. We create a meaningful memory that the recipient can return to again and again. Letters last forever!

¹**shelf life:** the length of time that an object lasts



64 Read this sentence from Paragraph 3.

I think that the most important drawback with phone calls is that we can't save and print them.

What does the underlined word mean in this sentence?

- F** puzzle
- G** error
- H** problem
- J** trap

Go On ►

65 The main purpose of this speech is to

- A** inform listeners about the recent decline in letter writing.
- B** compare for listeners several different forms of communication.
- C** persuade listeners to take the time to compose handwritten letters.
- D** explain to listeners why e-mails are a popular form of communication.

66 Who is most likely the intended audience of Dawn's speech?

- F** her classmates
- G** new students
- H** staff members
- J** club sponsors

67 Which sentence from the speech is the thesis statement?

- A** There are probably many reasons why people mail fewer letters today than in previous decades.
- B** It is my belief, though, that widespread use of e-mail and cheaper long-distance calling make letter writing less appealing.
- C** We may think that because we are not famous, others will not be interested in reading our letters.
- D** Although phone calls and e-mails are important forms of communication, I believe that we should all take the time to master the skill of writing a good letter.

68 In order to engage the audience during her speech, it is most important for Dawn to

- F** maintain a serious expression.
- G** focus on the content of her notes.
- H** adjust her speaking rate as needed.
- J** gaze at one section of the audience.

69 The organizational structure of Dawn's speech can best be described as

- A** cause-effect.
- B** comparison and contrast.
- C** chronological.
- D** problem and solution.

70 To develop this speech, Dawn works with a group of students who help each other brainstorm ideas for their speeches and practice presenting them. In order for the group to brainstorm productively, it is most important for them to

- F** seek consensus on the ideas to use in their speeches.
- G** gain the floor for sharing speech ideas in an orderly way.
- H** research ideas for the speeches of other group members.
- J** assign one group member to record the ideas for each speech.

- 71** While practicing speeches in their group, Dawn has to make sure each student has the opportunity to practice on several occasions before the speeches are due. Her role is best described as the
- A** timekeeper.
 - B** reporter.
 - C** recorder.
 - D** leader.

- 72** Which statement is a critique of the speech?
- F** According to the speaker, writing letters reveals more about the character of the writer than e-mails.
 - G** The speaker should have presented more facts about modern forms of communication.
 - H** One benefit of writing letters is that letters can last a long time if they are preserved correctly.
 - J** The use of faster forms of communication is to blame for the recent decline in letter writing.

- 73** Which sentence from the speech is a fact?
- A** It is easy to write a quick note on the computer.
 - B** My grandmother recently showed me some letters my great-grandfather wrote to his family while he served in World War II.
 - C** It was fascinating to read them.
 - D** True, writing a letter does take more time than typing a quick e-mail or picking up the telephone, but that is the benefit of a letter.

Directions Read and answer Numbers 74 through 83.

74 In an organized group, which member is responsible for conducting research?

- F** the leader
- G** the reporter
- H** the timekeeper
- J** the information gatherer

75 The school needs student volunteers for a fundraiser. Which of these would be the best method for gaining volunteers?

- A** a sign-up booth in the cafeteria
- B** an article in the student newspaper
- C** fliers sent to the first period teachers
- D** posters put up in the school hallways

76 Read this sentence.

In the short story “The Echoes of a Seaside Summer,” Shirley James, the President of a Janesville book club, lives in an old, Victorian house where the club members have highly comical discussions about the bestsellers they read.

Which underlined word should not be capitalized?

- F** Seaside
- G** President
- H** Janesville
- J** Victorian

Go On ►

Read these steps for accessing information about your account by phone.

- 1. When prompted, enter your account number.*
- 2. After you hear the recorded greeting for the account information office, press 54 for information about existing accounts.*
- 3. The automated system will then provide balance and payment information about your account.*
- 4. Enter the number for the account information office. The number is located on your bill under “Contact Us.”*

Which is the best way to order the steps?

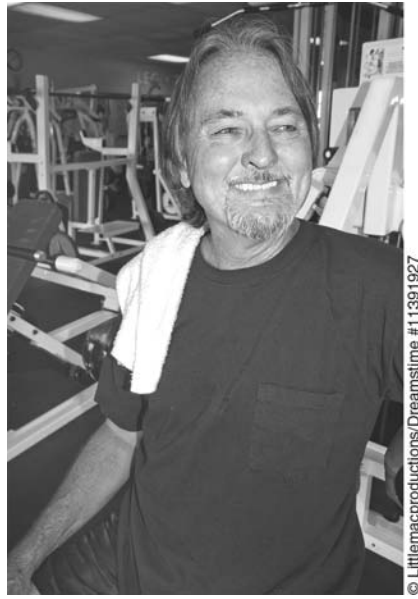
- A** 2, 4, 1, 3
- B** 2, 1, 3, 4
- C** 4, 3, 2, 1
- D** 4, 2, 1, 3

1. *On the one side is land, and on the other side is the sea. In between these realms are the tidal pools, rocky, sandy areas that are alternately wet and dry as the tide comes in or goes out. Living in this sandy band between earth and sea are special creatures that call the tidal pools home.*
2. *Life in the tidal pools is difficult, as the waves constantly pound the area. Some of the plants and animals survive in this environment by hanging on or digging in. Barnacles attach themselves to rocks with a special glue, while mussels send special cords into the sand to stay in one place.*
3. *Why would so many creatures want to live in tidal pools? After all, the environment is inhospitable and even dangerous. According to scientists, tidal pools have many advantages, such as providing rich sources of food and a high oxygen level. Both are due, in part, to the actions of the waves, which make the tidal pools both challenging and rewarding places to live.*
4. *Others take shelter among the rocks only when needed. Among these are many species of crabs. A good example of this is the Porcelain Crab, which is very flat and can slide under rocks to find safety from crashing waves or hungry predators. Some rocks may shelter hundreds of these little creatures.*

Choose the most logical order for the paragraphs in this report.

- F** 1, 2, 4, 3
- G** 1, 4, 3, 2
- H** 4, 2, 3, 1
- J** 2, 4, 1, 3

79 Look at the photograph.



What can the reader best conclude about the man in the photograph?

- A** He is a professional trainer.
- B** He is the owner of the gym.
- C** He enjoys exercising in the gym.
- D** He is more fit than many other people.

Look at the photograph.



A state park wants to use this photo in a brochure. What message is the park most likely trying to communicate with this photograph?

- F** The park is a place of natural beauty.
- G** The park is most beautiful in the fall.
- H** The park is a place for people of all ages.
- J** The park is known for moths and butterflies.

81 Look at this photograph.



Which conflict is best expressed by this photograph?

- A** person vs. environment
- B** person vs. person
- C** person vs. technology
- D** person vs. self

A student is giving a presentation about the history of the Internet. Look at his note cards.

1.
Many people use their computers to go online for information, shopping, communication, and entertainment.

2.
A network called ARPANET is formed, but access is very limited. Most people do not yet own computers.

3.
The earliest computers—large, simple, and expensive—are developed. Scientists imagine the possibility of a huge network of computers sharing information.

4.
A global network is established and for the first time, the public is given access.

Choose the correct order for the note cards.

- F** 3, 1, 2, 4
- G** 3, 2, 4, 1
- H** 1, 2, 3, 4
- J** 1, 3, 2, 4

Choose the sentence that uses the underlined word correctly.

- A** Its six o'clock and time to close Scofield District's annual craft sale.
- B** Its obvious that we need more help to complete this project on time.
- C** Mary's Bakeshop advertises it's blueberry muffins every Friday.
- D** Sometimes it's necessary for us to help each other.

**DO NOT
MARK
ON THIS
PAGE**

Mathematics



Part 1

- 1** What is the value of y in the solution to this system of linear equations?

$$2y - x = -8$$

$$5y + x = -6$$

- A** 4
- B** 2
- C** -2
- D** -4

- 2** Four numbers are shown below.

$$2^3, 7.5, \sqrt{70}, 2\sqrt{10}$$

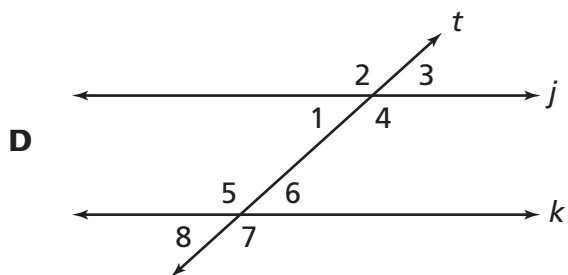
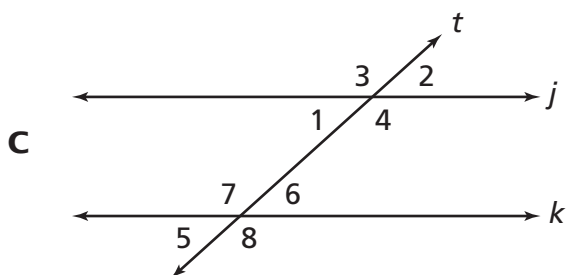
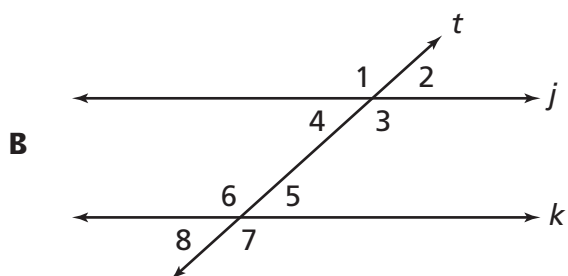
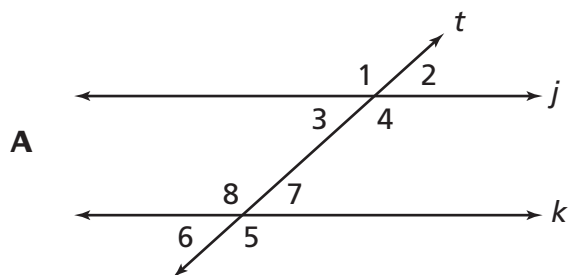
Which list shows these numbers in order, from greatest to least value?

- F** $\sqrt{70}, 2^3, 7.5, 2\sqrt{10}$
- G** $\sqrt{70}, 2\sqrt{10}, 2^3, 7.5$
- H** $2\sqrt{10}, 7.5, 2^3, \sqrt{70}$
- J** $2\sqrt{10}, \sqrt{70}, 2^3, 7.5$

Go On ►

3 Which figure appears to contain all the characteristics below?

- Line j and Line k are parallel lines.
- Line j and Line k are cut by a transversal, t .
- The measure of Angle 2 is equal to the measure of Angle 4.
- The measure of Angle 5 is equal to the measure of Angle 7.



4 Which equation represents a linear function?

F $y = 5x^2 + 12$

G $y = \sqrt{4x} + 4$

H $y = -2x - 3$

J $y = |3x| + 7$

5 Which statement is true?

A The number $\frac{9}{10}$ is irrational.

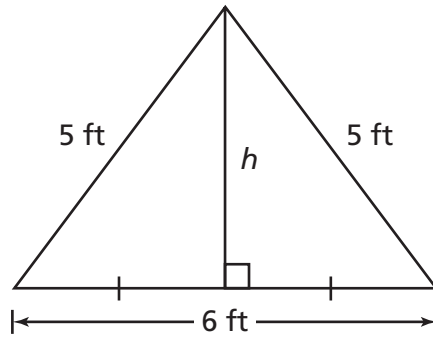
B The number $(\sqrt{2})^2$ is rational.

C The number $\sqrt{44}$ is rational.

D The number $\frac{6\pi}{15\pi}$ is irrational.

Go On ►

- 6** A triangular face of a dog house is represented in the diagram below.



$$a^2 + b^2 = c^2$$

Which measurement is closest to the height, h , of this dog house?

- F** 3.3 feet
- G** 4 feet
- H** 5.8 feet
- J** 11 feet

- 7** The speed of a space shuttle is 17,321 miles per hour. At this speed, without stopping, what is the total number of miles the space shuttle will travel in five days?

$$\text{distance} = \text{rate} \times \text{time}$$

- A** 86,605 miles
- B** 415,704 miles
- C** 2,078,520 miles
- D** 5,196,300 miles

8 Which expression is equivalent to the product of 231,000,000,000 and 42,000,000,000,000?

F $(2.31 + 4.2) \times 10^{(11 \times 13)}$

G $(2.31 + 4.2) \times 10^{(11 + 13)}$

H $(2.31 \times 4.2) \times 10^{(11 \times 13)}$

J $(2.31 \times 4.2) \times 10^{(11 + 13)}$

9 Given:

$$\begin{cases} f(x) = \frac{6}{x - 4} \\ g(x) = \frac{5}{x + 4} \end{cases}$$

For what value of x does $f(x) = g(x)$?

A 4

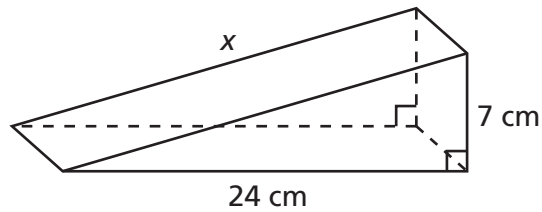
B 0

C -8

D -44

Go On ►

- 10** The lengths of two edges of the figure below are shown in centimeters.



$$a^2 + b^2 = c^2$$

What is the length of Edge x ?

- F** 25 cm
- G** 31 cm
- H** 569 cm
- J** 625 cm

- 11** The sponsor of a math club is ordering shirts for club members. The table below shows the total price for a number of shirts from each of four vendors.

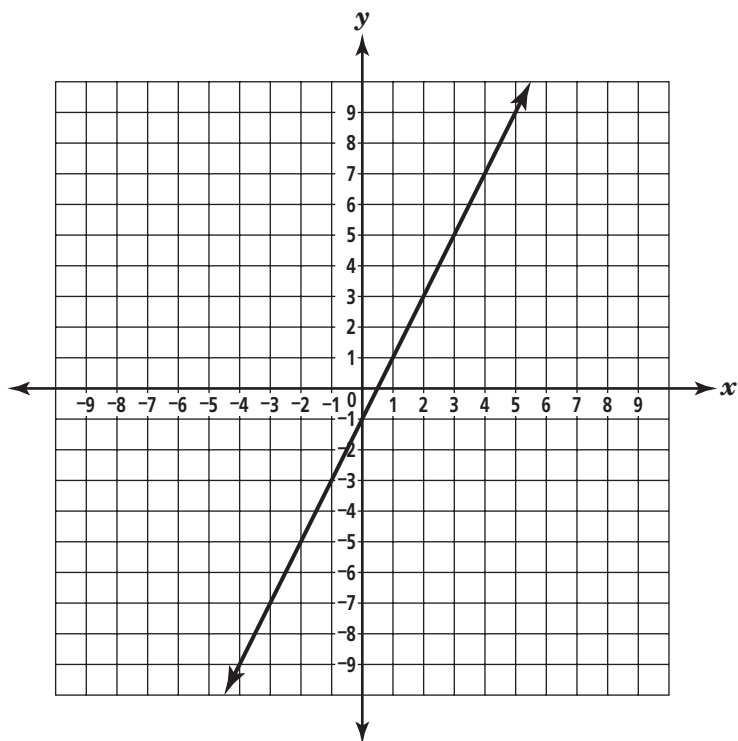
Shirt Vendors

Vendor	Number of Shirts	Total Price
Q	50	\$320.00
R	60	\$380.00
S	75	\$530.00
T	80	\$560.00

Which vendor offers the lowest price per shirt?

- A** Vendor Q
- B** Vendor R
- C** Vendor S
- D** Vendor T

12 Which equation is best represented by the graph below?



F $y = -x + 2$

G $y = -x + \frac{1}{2}$

H $y = \frac{1}{2}x - 1$

J $y = 2x - 1$

Go On ►

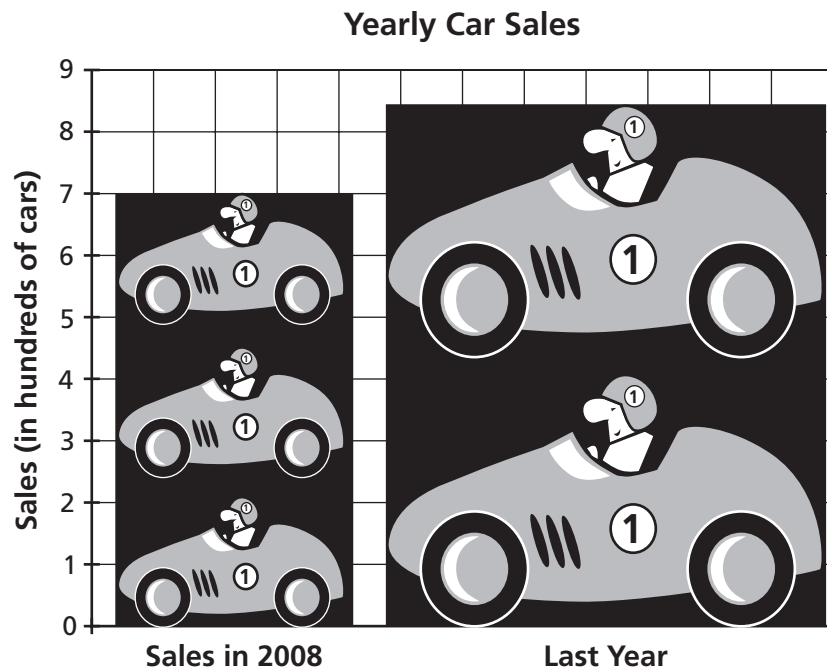
- 13** Steven's morning workout consists of jogging 8 miles per hour for 0.75 hour and then walking at a rate of 3 miles per hour for 0.5 hour. How many miles does Steven travel during his morning workout?

$$\text{distance} = \text{rate} \times \text{time}$$

- A** 7.5 miles
- B** 8.8 miles
- C** 13.8 miles
- D** 16.7 miles

14

The manager of a car dealership wanted to show that his dealership sold more cars last year than in 2008. The manager created the graph below to show this increase in sales.



Which statement best describes how this graph misrepresents the change in sales?

- F** The graph actually shows a decrease in the number of cars sold because the dealership went from selling three small cars to selling two large cars.
- G** Using differently sized cars for each year makes it appear as if the sales last year were much greater than they actually were.
- H** Sales should have been reported in the number of dollars spent instead of the number of units sold.
- J** The graph does not show the sales between 2008 and last year.

Go On ►

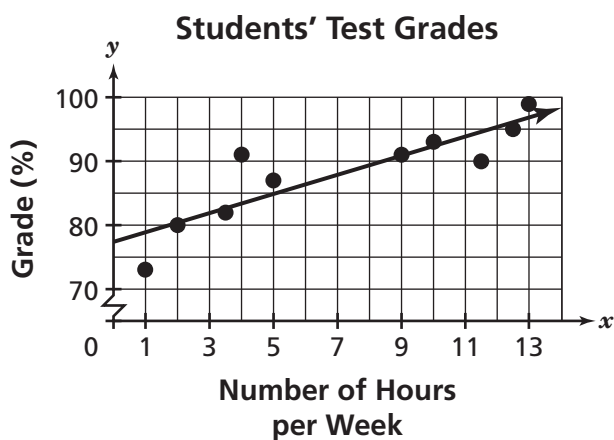
- 15** Four numbers are shown below.

$$3.9, \frac{31}{7}, \sqrt{15}, \frac{15}{4}$$

Which list shows these numbers in order, from least to greatest value?

- A** $\frac{15}{4}, \frac{31}{7}, 3.9, \sqrt{15}$
- B** $\frac{31}{7}, 3.9, \sqrt{15}, \frac{15}{4}$
- C** $\sqrt{15}, \frac{15}{4}, 3.9, \frac{31}{7}$
- D** $\frac{15}{4}, \sqrt{15}, 3.9, \frac{31}{7}$

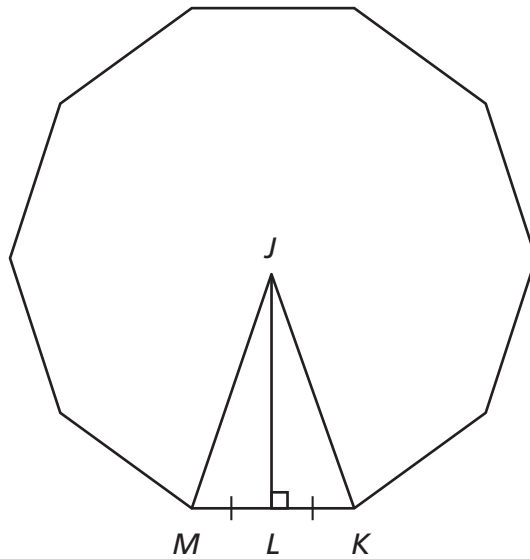
- 16** The scatterplot below shows the relationship between the test grades for 10 students and the numbers of hours they studied per week.



Based on the scatterplot, which is the best prediction of the test grade for a student who studied for 7 hours?

- F** 98%
- G** 91%
- H** 88%
- J** 82%

- 17** The regular decagon below has the Center J .



$$a^2 + b^2 = c^2$$

The length of Line Segment JK is 4 feet and the length of Line Segment JL is 3.8 feet. Which is closest to the perimeter of the regular decagon?

- A** 31.2 ft
- B** 25.0 ft
- C** 15.6 ft
- D** 12.5 ft

- 18** Given the equations below, what is the value of x when $f(x) = g(x)$?

$$f(x) = 3(x - 2)$$

$$g(x) = 0.5(4x - 8)$$

- F** -10
- G** -6
- H** -2
- J** 2

- 19** The list below shows the size and price of four different packages of pet snacks.

- 32 ounces for \$29
- 24 ounces for \$22
- 18 ounces for \$16
- 16 ounces for \$15

Which size package has the lowest price per ounce for pet snacks?

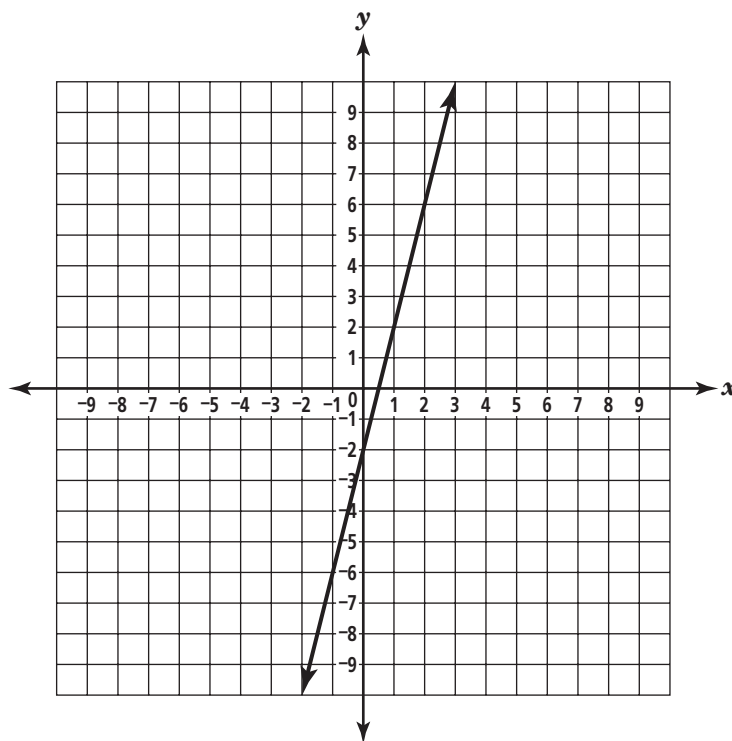
- A** 32 ounces
- B** 24 ounces
- C** 18 ounces
- D** 16 ounces

- 20** A red blood cell is 8×10^{-6} meters long. A skin cell is 3×10^{-5} meters long. How many times longer is the skin cell than the red blood cell?

- F** 3.75×10^{-1}
- G** 2.67×10^0
- H** 3.75×10^0
- J** 2.67×10^1

Go On ►

- 21** The graph of the function $y = 4x - 2$ is shown below.

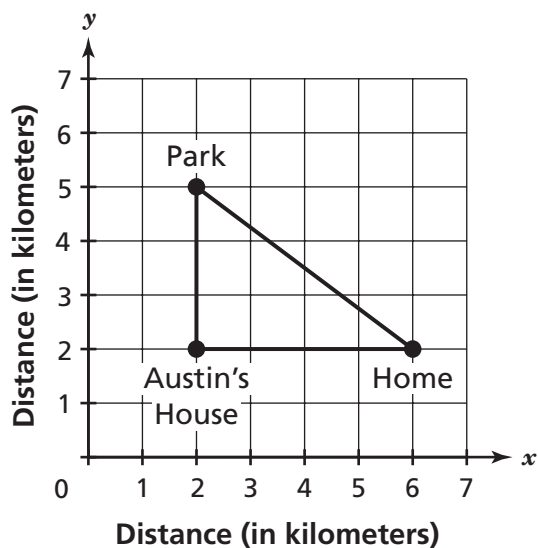


What is the value of y in this function when $x = 2$?

- A** -10
- B** -4
- C** 1
- D** 6

22

Jamal rode his bike from his home to Austin's house. From Austin's house, he rode to the park and then directly back home. The path on the coordinate grid below represents the path Jamal took.



$$a^2 + b^2 = c^2$$

What is the total distance that Jamal rode his bike?

- F** 4 km
- G** 5 km
- H** 12 km
- J** 25 km

Go On ►

23 Which expression can be used to find the quotient of 0.000000048 and 16,000,000?

A $\frac{4.8}{1.6} \times 10^{(-8-7)}$

B $\frac{4.8}{1.6} \times 10^{(8-7)}$

C $(4.8 - 1.6) \times 10^{(-8-7)}$

D $(4.8 - 1.6) \times 10^{(8-7)}$

24 Which set of ordered pairs best represents the linear function $f(x) = \frac{1}{2}x + 2$?

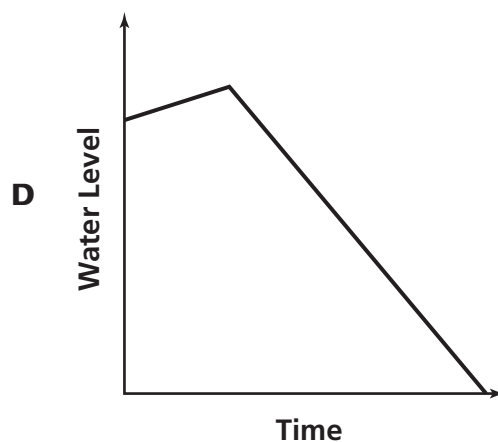
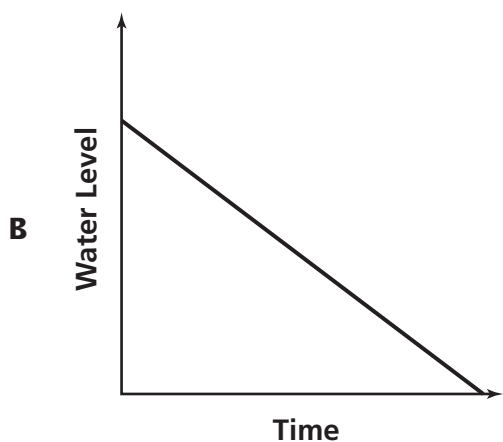
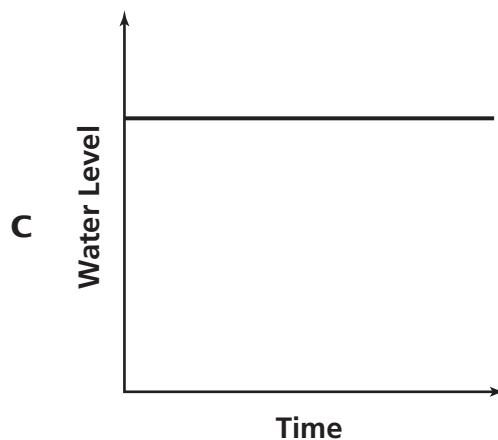
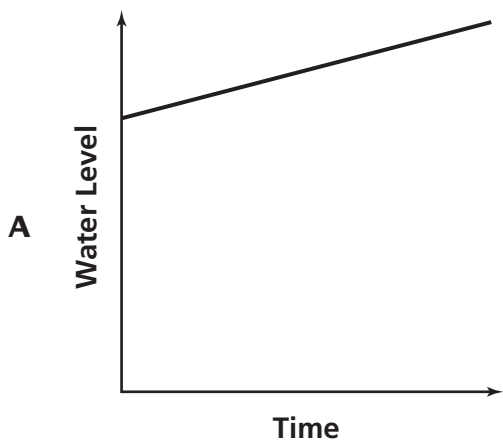
F $\{(-4, -7.5), (-1, -1.5), (2, 4.5), (4, 8.5)\}$

G $\{(-4, -1), (-1, 0.5), (2, 2), (4, 3)\}$

H $\{(-4, 0), (-1, 1.5), (2, 3), (4, 4)\}$

J $\{(-4, 0), (-1, 3), (2, 6), (4, 8)\}$

- 25** Which graph best represents the relationship between the water level in a swimming pool and the time that has passed since the pool began draining?



- 26** Which number is rational?

F $\frac{7\pi}{4}$

G $\sqrt{18}$

H 2.121121112...

J $\frac{\sqrt{44}}{\sqrt{99}}$

Go On ►

27 What is the solution to this system of linear equations?

$$2x - 2y = 10$$

$$x + 4y = 30$$

- A** (10, 5)
- B** (50, -5)
- C** (0, 5)
- D** (10, -5)

28 What is the slope of the line represented by the equation $\frac{3}{7}y + \frac{3}{4}x = \frac{3}{5}$?

- F** $-\frac{21}{4}$
- G** $-\frac{7}{4}$
- H** $\frac{3}{4}$
- J** $\frac{7}{4}$

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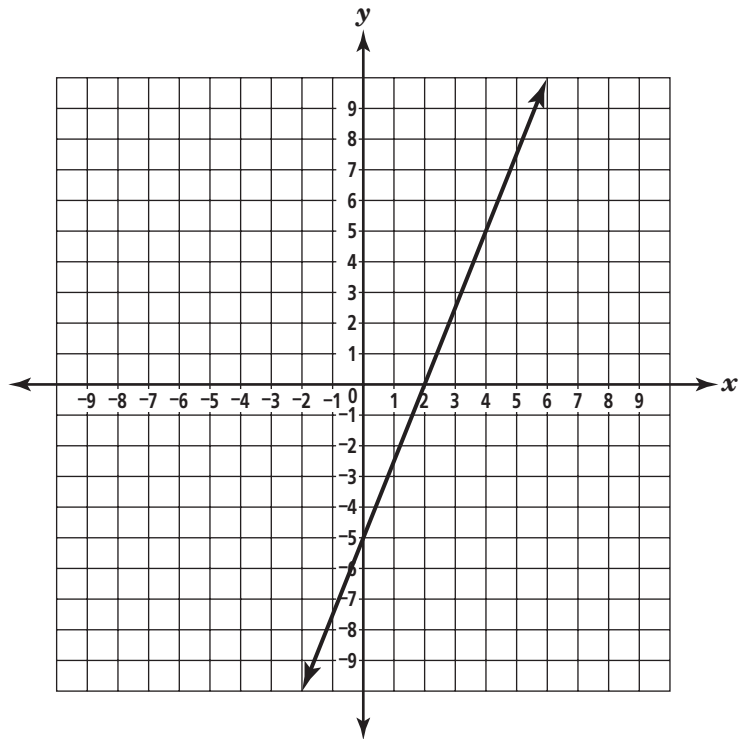
Part 2

29 Which quotient is equivalent to the expression below?

$$\frac{3.6 \times 10^{-6}}{4.5 \times 10^2}$$

- A** 8.0×10^{-8}
- B** 8.0×10^{-9}
- C** -8.0×10^{-8}
- D** -8.0×10^{-9}

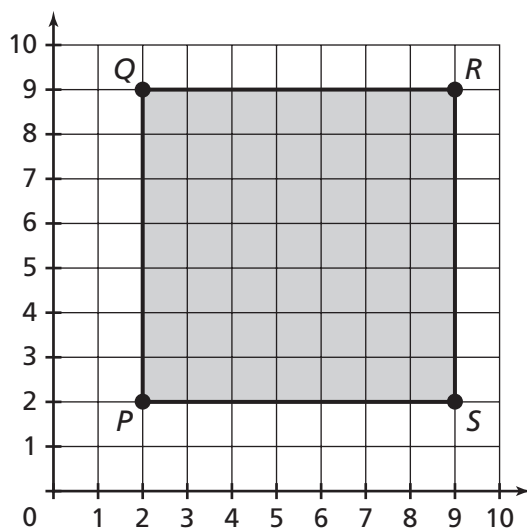
30 What appears to be the y -intercept of this function?



- F** (2, 0)
- G** (0, 2)
- H** (0, -5)
- J** (-5, 0)

Go On ►

- 31** Square $QRSP$ is shown on the grid below.



$$a^2 + b^2 = c^2$$

Which is the closest to the straight-line distance between Points Q and S ?

- A** 14 units
- B** 10 units
- C** 9 units
- D** 7 units

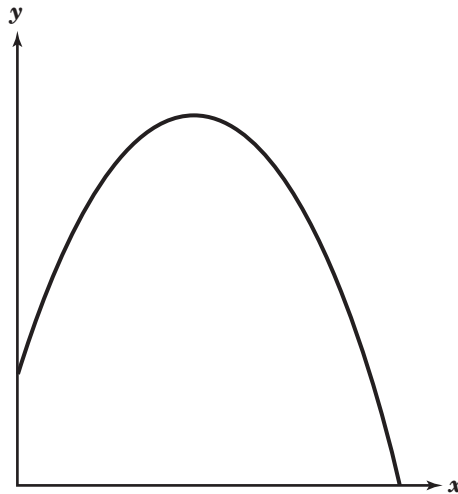
- 32** What is the solution to this system of linear equations?

$$3y + 2x = 4$$

$$y - 4x = 20$$

- F** $(4, -4)$
- G** $(4, 4)$
- H** $(-4, -4)$
- J** $(-4, 4)$

- 33** Which situation is best represented by the graph below?

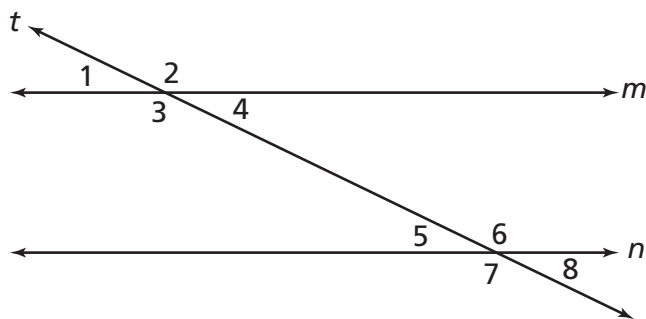


- A** the volume of a balloon from the time the balloon is filled with helium to the time the balloon bursts
- B** the height of a rock from the time the rock falls from the top of a cliff to the time the rock lands on the ground below
- C** the distance between a ball and the ground from the time the ball is thrown into the air to the time the ball falls to the ground
- D** the distance of a hiker from the start of a trail from the time he starts walking to the time he rests in the middle of the trail

- 34** The star Vega is approximately 2.38×10^{14} kilometers from Earth. The star Antares is approximately 4.94×10^{15} kilometers from Earth. How much farther from Earth is the star Antares than the star Vega?

- F** $2.56 \times 10^1 \text{ km}$
- G** $2.56 \times 10^{14} \text{ km}$
- H** $4.702 \times 10^{14} \text{ km}$
- J** $4.702 \times 10^{15} \text{ km}$

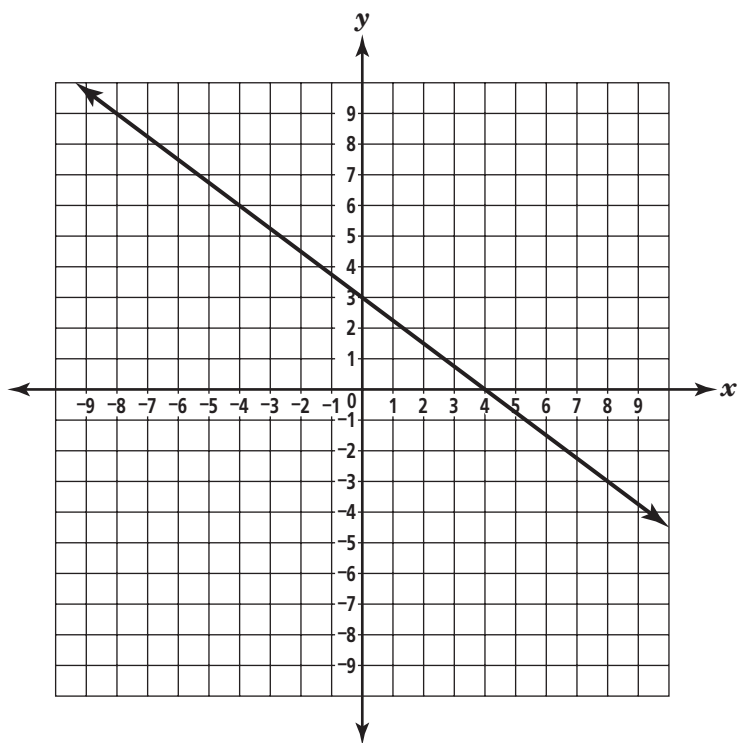
Lines m and n are parallel and cut by Transversal t , as shown in the figure below.



Based on this figure, which statement is not true?

- A** $m\angle 1 + m\angle 8 = 180^\circ$
- B** $m\angle 3 = m\angle 6$
- C** $m\angle 2 + m\angle 5 = 180^\circ$
- D** $m\angle 4 = m\angle 5$

- 36** The graph of $y = -\frac{3}{4}x + 3$ is shown below.



What is the value of x in this function when $y = 6$?

- F** -4
- G** -1.5
- H** 7.5
- J** 12

37

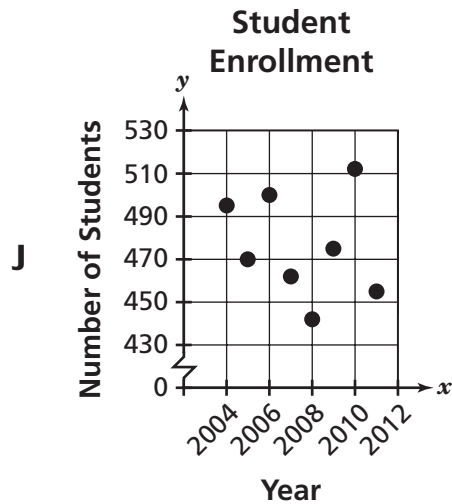
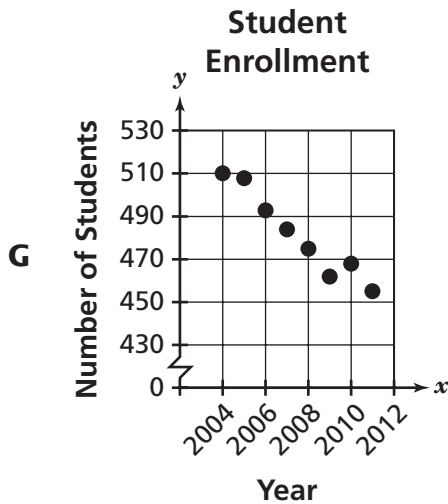
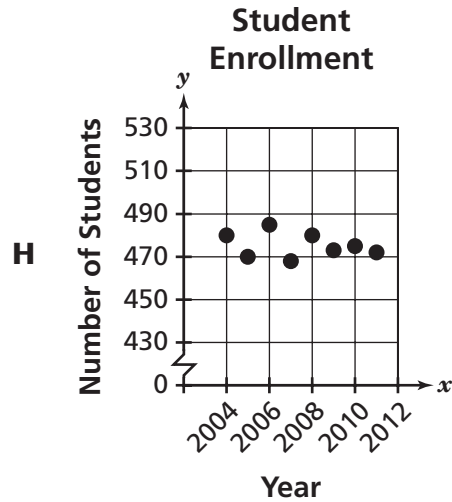
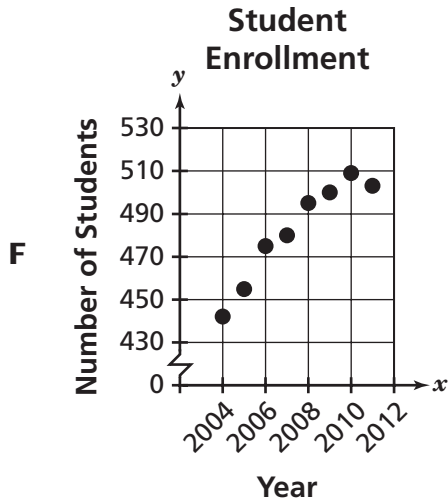
An insect traveled at a speed of 100 yards per hour for 90 minutes. Then it traveled for 15 minutes at twice its original speed. What is the total number of yards this insect traveled?

$$\text{distance} = \text{rate} \times \text{time}$$

- A** 300 yards
- B** 200 yards
- C** 150 yards
- D** 140 yards

38

The graphs show the student enrollment at a school from 2004 through 2011. Which graph best shows a negative correlation between the number of students and the years from 2004 through 2011?



39 Which number has the greatest value?

A 8.5

B $3\sqrt{8}$

C $\frac{15}{2}$

D 1^9

40 Given: $\begin{cases} f(x) = 2x - 8 \\ g(x) = 4(x + 6) \end{cases}$

For what value of x does $f(x) = g(x)$?

F -16

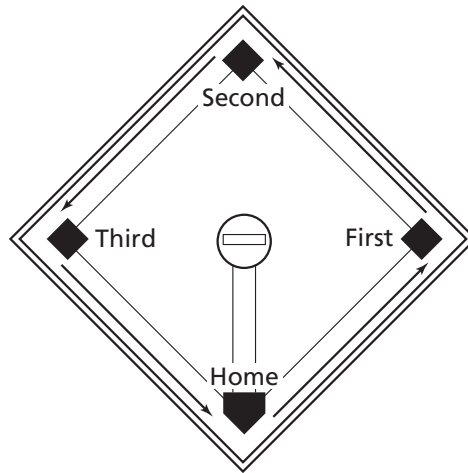
G -8

H -7

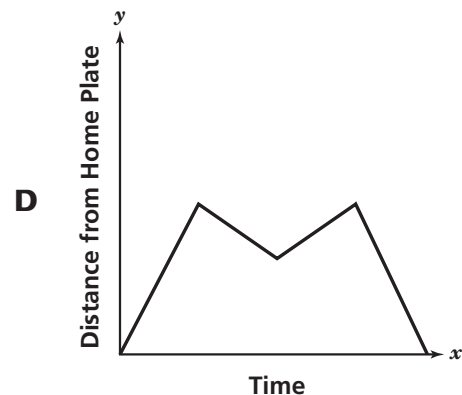
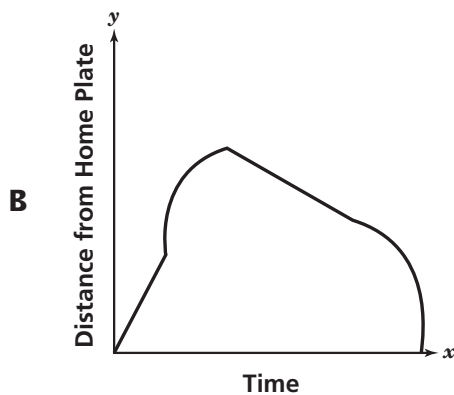
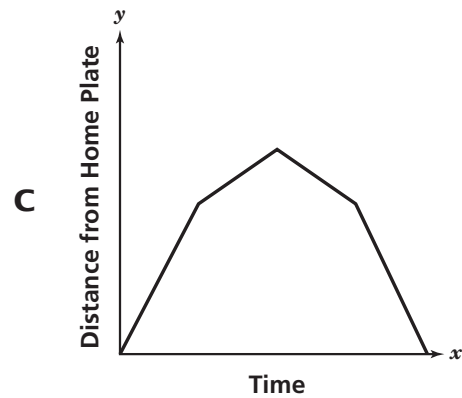
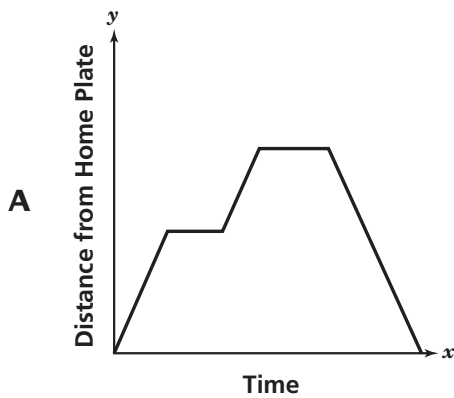
J -1

41

A baseball player hits a home run by being able to run in a straight line from home plate, to first base, second base, third base and back to home plate in one play. A diagram of a baseball diamond and the path the player must run is shown below.

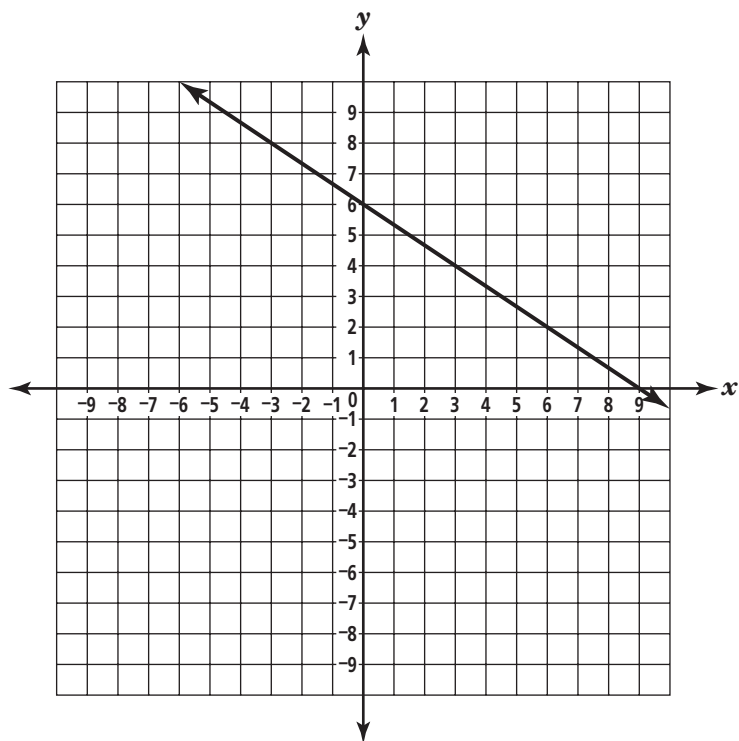


Which graph best represents the distance between the baseball player and home plate as he runs the bases after hitting a home run?



Go On ►

42 What is the slope of the line represented by the graph below?



F $-\frac{3}{2}$

G $-\frac{2}{3}$

H $\frac{2}{3}$

J $\frac{3}{2}$

- 43** The table below compares a snack manufactured by Brand X and a snack manufactured by Brand Y.

Brand X and Brand Y Snacks

Description	Brand X	Brand Y
Container Size (ounces)	12	18
Number of Servings per Container	6	6
Cost per Container	\$2.10	\$2.00
Calories per Serving	300	450

Brand X claims that their snack is lower in calories than the snack manufactured by Brand Y. Which statement best explains why this claim is misleading?

- A** One serving of the Brand X snack costs more than one serving of the Brand Y snack.
- B** One container of the Brand X snack weighs less than one container of the Brand Y snack.
- C** One container of the Brand X snack has fewer calories than one container of the Brand Y snack.
- D** One ounce of the Brand X snack has the same number of calories as one ounce of the Brand Y snack.

- 44** Which number is an irrational number?

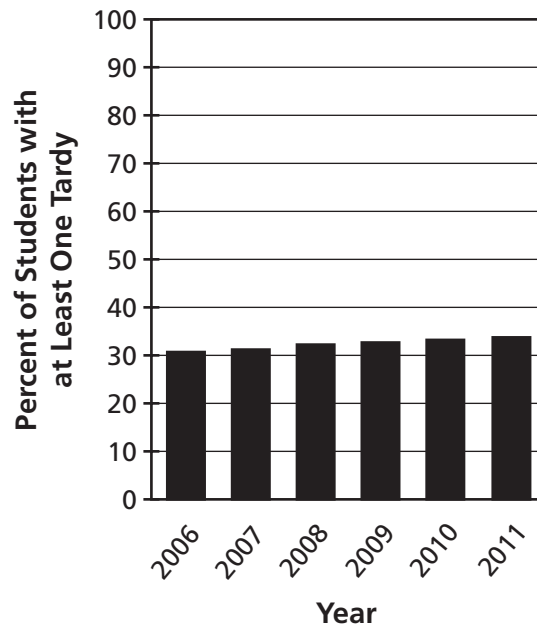
- F** 8.23
- G** $\frac{\sqrt{56}}{2}$
- H** $\frac{\sqrt{144}}{6}$
- J** 0.0079

- 45** What is the slope, m , of the line that passes through the ordered pairs $(4, -6)$ and $(-5, 7)$?

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

- A** $-\frac{13}{9}$
- B** $-\frac{6}{5}$
- C** $-\frac{5}{6}$
- D** $-\frac{9}{13}$

A school newspaper published an article titled “Percent of Students Tardy to Class Remains Unchanged Since 2006.” The graph below was used to support the school newspaper’s claim.



Which statement best explains why this graph is misleading?

- F** The bars on the graph should have more space between them.
- G** The scale on the horizontal axis does not include years prior to 2006.
- H** The graph does not include the percent of students who are absent.
- J** The scale on the vertical axis makes it difficult to see that the percent is increasing.

47 Which equation does not represent a linear function?

A $y = 7x$

B $y = x^2 - 6$

C $y = \frac{2}{3}x + \frac{7}{3}$

D $y = \frac{1}{3}x - \frac{1}{2}$

48 The speed of sound is approximately 343 meters per second. What is the total amount of time it will take a sound wave to travel 2 kilometers?

$\text{distance} = \text{rate} \times \text{time}$
--

F 0.006 second

G 1.72 seconds

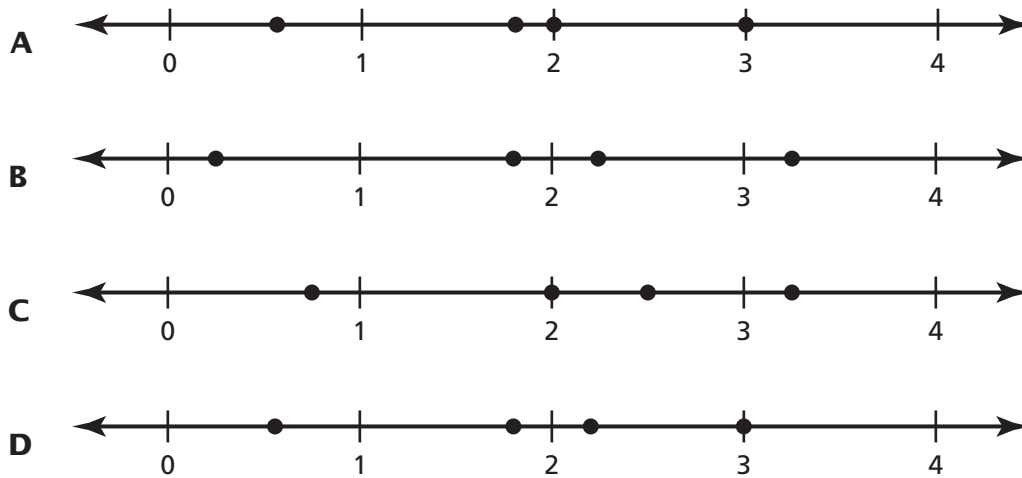
H 2.92 seconds

J 5.83 seconds

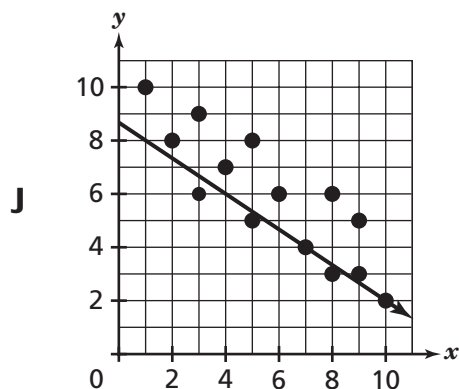
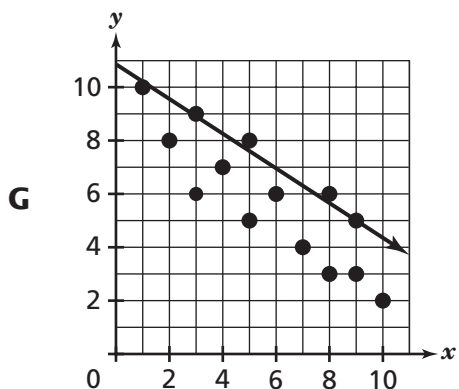
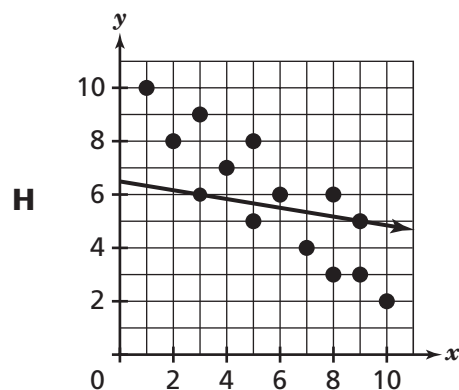
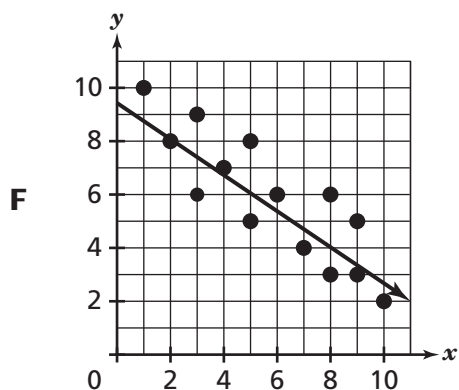
- 49** Look at the list of values.

$$\frac{5}{9}, \frac{9}{5}, \sqrt{5}, \text{ and } \frac{13.5}{4.5}$$

Which number line has all four values plotted correctly?



50 Which graph shows the most accurate line of best fit for the given data?



51 A soccer field is 100 yards long and 60 yards wide. A different soccer field is 30 yards long and 15 yards wide. Which measurement is closest to the difference between the lengths of the diagonals of these soccer fields?

$$a^2 + b^2 = c^2$$

- A** 6 yards
- B** 54 yards
- C** 74 yards
- D** 83 yards

52 One mole of an element is defined as a sample containing 6.0×10^{23} atoms of that element. Based on this information, how many atoms are there in 1.5×10^{-6} mole of an element?

- F** 9.0×10^{29}
- G** 7.5×10^{29}
- H** 9.0×10^{17}
- J** 7.5×10^{17}

53 The list below shows the specials being offered by two different pizza restaurants.

- The Pizza Shack: Buy 6 large pizzas for \$34, and get one free.
- Donatello's Pizza: Buy 4 large pizzas for \$21.

Based on this information, which statement is true?

- A** The Pizza Shack offers the best buy at a price of \$4.86 per large pizza.
- B** The Pizza Shack offers the best buy at a price of \$5.67 per large pizza.
- C** Donatello's Pizza offers the best buy at a price of \$5.25 per large pizza.
- D** Donatello's Pizza offers the best buy at a price of \$3.50 per large pizza.

54 Four functions are shown below.

$$f(x) = -2$$

$$g(x) = 10^x$$

$$h(x) = x^2 - 25$$

$$k(x) = |x + 6|$$

Based on these functions, which statement is true?

- F** Function k is linear because it does not contain a term with an exponent.
- G** Function g is linear because the function is increasing at a constant rate.
- H** Function h is nonlinear because the exponent of x is greater than one.
- J** Function f is nonlinear because there is no slope.

55 Which equation is best represented by the table of values below?

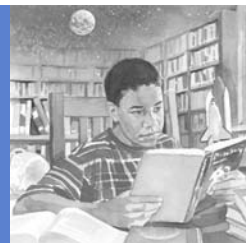
x	y
-6	-6
-4	-3
-1	1.5
0	3
3	7.5
7	13.5

- A** $2y - 3x = 6$
- B** $2x - 3y = 6$
- C** $3y + 2x = 6$
- D** $3x + 2y = 6$

STOP 

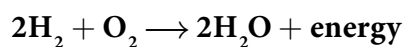
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Part 1

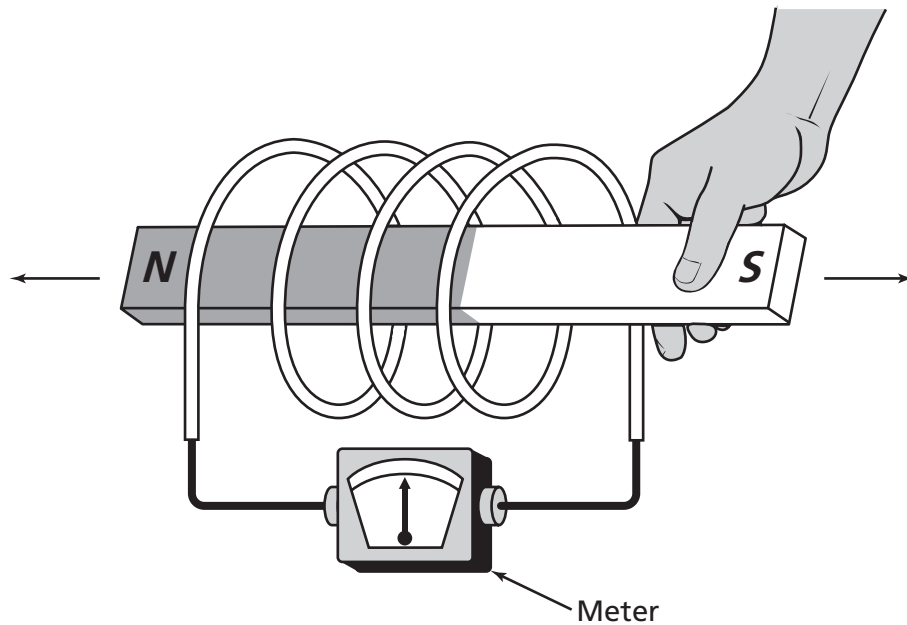
- 1** The equation below represents hydrogen and oxygen combining to form water.



Which statement best explains how this reaction is similar to all chemical reactions?

- A** Matter is created.
- B** Energy is released.
- C** The product is in a different state than the reactants.
- D** The product has different properties from the reactants.

- 2** A student attaches a meter to a wire coil. Next, the student moves a magnet back and forth through the coil, as shown in the picture below.



As the magnet moves back and forth, the meter indicates

- F** volume.
- G** temperature.
- H** current
- J** conductivity.

- 3** The most basic unit of matter in the composition of an apple is

- A** a molecule.
- B** a tissue.
- C** an atom.
- D** a compound.

4 Which of these is an element and not a compound?

F CO_2

G CaO

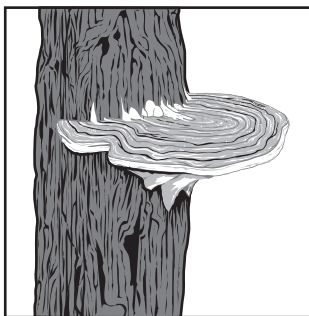
H Cl

J CaCl_2

Go On ►

5

A picture of a fungus and a classification key are shown below.



Fungus Classification Key

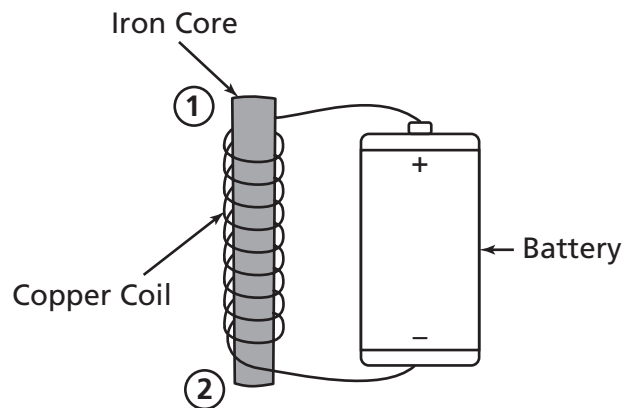
1. a. Grows shelf-like on wood..... go to 2
b. Grows on a stem out of the ground go to 3
2. a. Pattern of semi-circular stripes turkey tail
b. No pattern of stripes or dots..... beefsteak
3. a. Has a round cap fly agaric
b. Has an irregularly-shaped cap..... go to 4
4. a. Cap is funnel-shaped golden chanterelle
b. Cap is brain-shaped common morel

Based on the key, which fungus is shown?

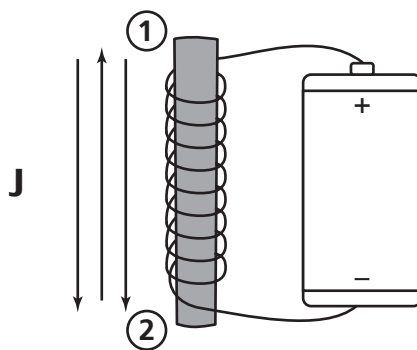
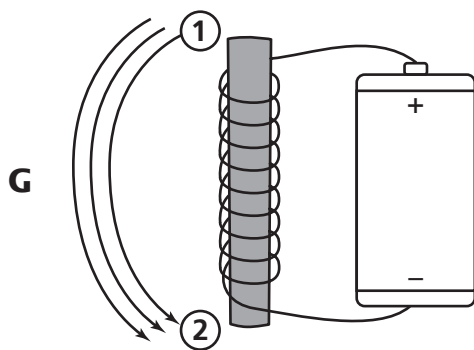
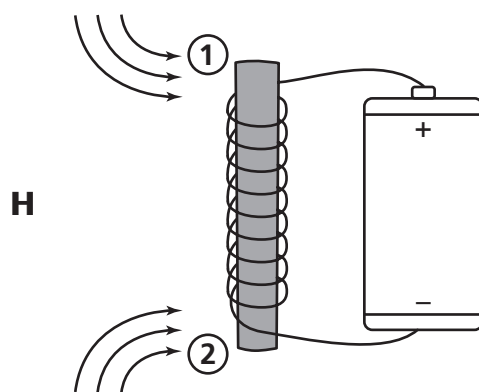
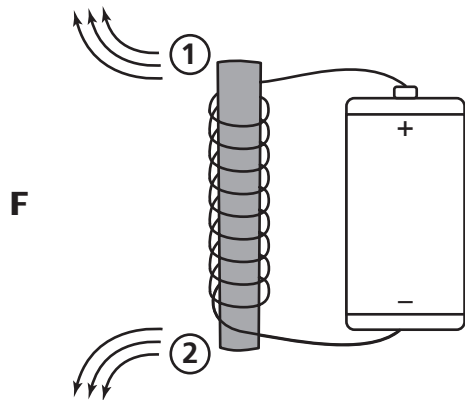
- A** turkey tail
- B** beefsteak
- C** golden chanterelle
- D** common morel

6

Two points are labeled on the iron core of the electromagnet shown below.

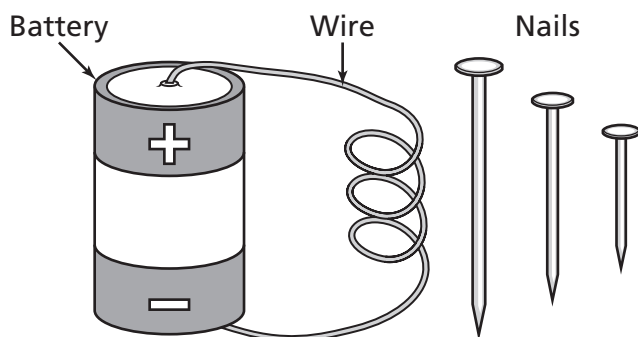


Which diagram best represents the lines of the magnetic field that pass through Points 1 and 2?



Go On ►

- 7** A student is performing an investigation on electromagnets using the supplies shown below. The student wants to determine how the size of the nail affects the strength of the electromagnet.



The student uses a different nail in each trial but keeps the same number of coils in the wire and uses the same battery. Which is the dependent variable in this investigation?

- A** type of battery
- B** size of nail
- C** number of coils in wire
- D** strength of electromagnet

- 8** A student stirs together salt crystals and sugar crystals. The crystals are the same size and color. Together the salt and sugar make a

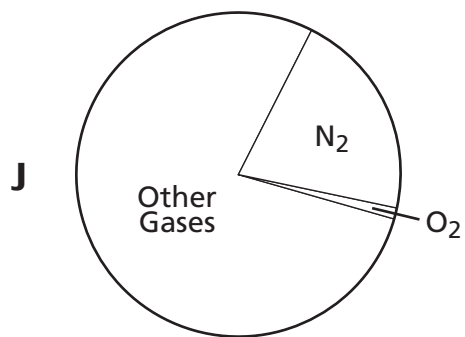
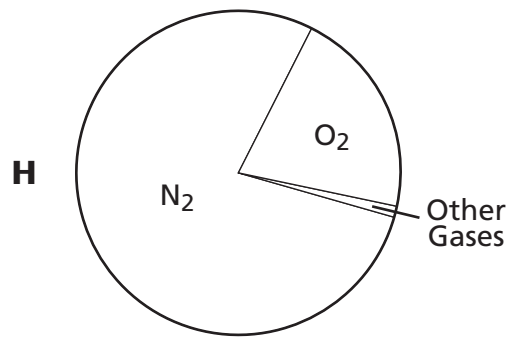
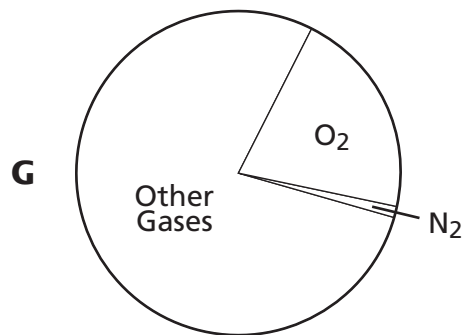
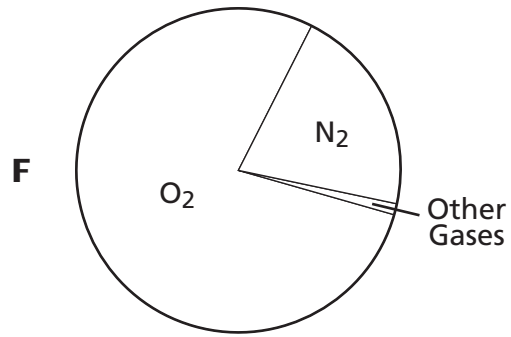
- F** solution.
- G** compound.
- H** mixture.
- J** molecule.

9 Which adaptation of black bears best helps them survive cold winters?

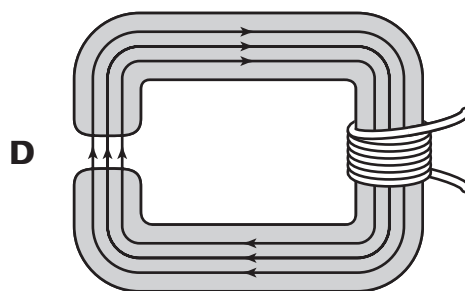
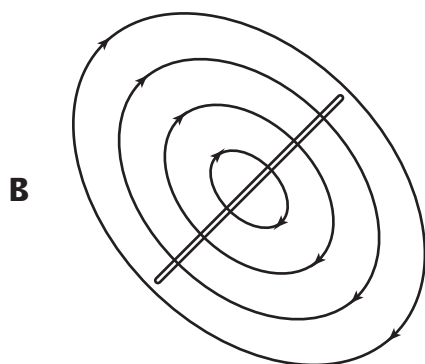
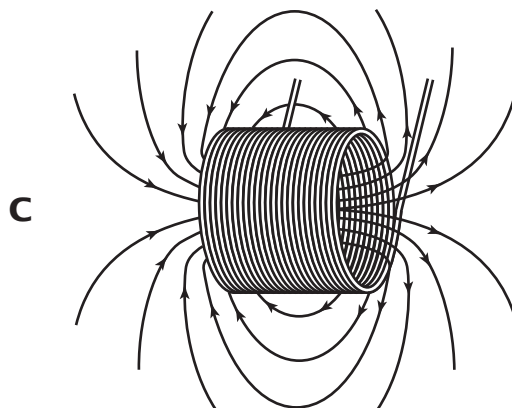
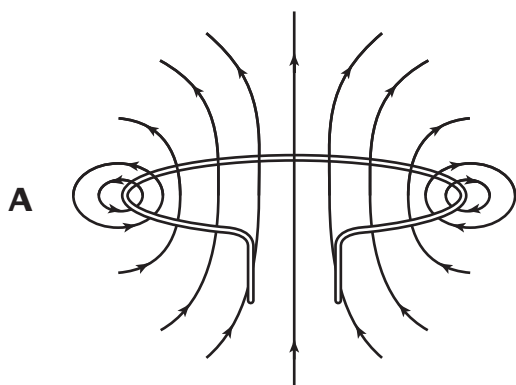
- A** having a large home range
- B** being able to hibernate
- C** eating both plants and animals
- D** having sharp teeth and claws

Go On ►

10 Which pie chart best represents the composition of the atmosphere of Earth?



11 Which diagram shows a magnetic field most similar to the magnetic field of Earth?

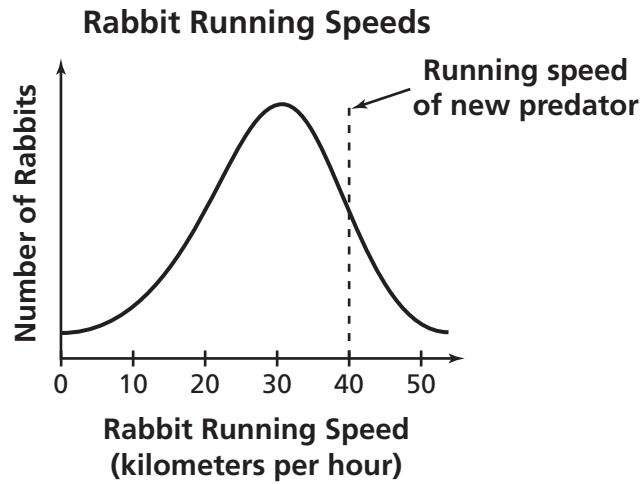


12 Students heated a white solid. The solid produced a flame during the heating process. The product cooled into a black solid. Which statement best classifies this change?

- F** The change was only physical because the heat produced a color change.
- G** The change was only physical because the properties of the substance were permanently changed.
- H** The change was only chemical because the substance remained in its original state.
- J** The change was only chemical because a flame was produced.

Go On ►

- 13** The graph below represents the amount of rabbits in a population that have different running speeds. A new predator is introduced to the area that has a running speed represented by the dashed line.



Which rabbits will most likely have a survival advantage after the introduction of this new predator?

- A** rabbits that run slower than 10 kilometers per hour
- B** rabbits that run between 20 and 30 kilometers per hour
- C** rabbits that run between 30 and 40 kilometers per hour
- D** rabbits that run faster than 40 kilometers per hour

- 14** Particles in a substance are widely separated from each other and move independently from place to place. The substance could be a

- F** solid only.
- G** gas only.
- H** gas or solid only.
- J** gas, liquid, or solid.

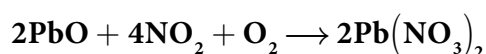
15 Which statement correctly describes the measurement of an object in units of grams and newtons?

- A** Both grams and newtons are measures of the amounts of matter that make up an object.
- B** Both grams and newtons are measures of the forces of gravity acting on an object.
- C** Grams are a measure of the amount of matter that make up an object, and newtons are a measure of the force of gravity acting on an object.
- D** Grams are a measure of the force of gravity acting on an object, and newtons are a measure of the amount of matter that make up an object.

16 A student is observing a chemical reaction that forms a liquid. Which tool should the student use to determine the volume of the liquid that is produced?

- F** electronic balance
- G** spring scale
- H** thermometer
- J** graduated cylinder

17 A balanced chemical equation is shown below.



The product in this equation is

- A** $\text{Pb}(\text{NO}_3)_2$.
- B** NO_2 .
- C** PbO .
- D** O_2 .

Go On ►

18 Many people depend on food caught in the ocean. Which action best helps people maintain the oceans as a food source?

- F** adding garden fertilizers to oceans
- G** exploring new parts of oceans
- H** preventing a loss of biodiversity in oceans
- J** building more sportfishing areas near oceans

19 A marble has a mass of 40 grams and a volume of 20 cubic centimeters.

$$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$$
$$D = \frac{m}{V}$$

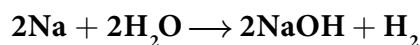
What is the density of the marble?

- A** 0.5 gram / cubic centimeter
- B** 2.0 grams / cubic centimeters
- C** 60 grams /cubic centimeters
- D** 800 grams / cubic centimeters

20 Which of these affects the strength of the gravitational force between Earth and the sun?

- F** the tilt of the axis of Earth
- G** the distance between Earth and the sun
- H** the amount of energy Earth receives from the sun
- J** the movement of molten metals in the core of Earth

- 21** In the equation shown, 46 grams of sodium (Na) react with 36 grams of water (H_2O).



If 2 grams of hydrogen gas (H_2) is produced by this reaction, what is the mass of sodium hydroxide (NaOH) produced?

- A** 10 grams
- B** 44 grams
- C** 80 grams
- D** 82 grams

- 22** A scientist was digging for fossils along a rocky cliff. The scientist discovered trilobite fossils in rocks at two different depths in the cliff. What can be determined about the fossils based on their locations?

- F** the relative age of the trilobite fossils
- G** the diet of the trilobites
- H** the number of trilobite predators
- J** the size of trilobite population

23 The diagram below shows part of the periodic table of the elements.

Periodic Table of the Elements

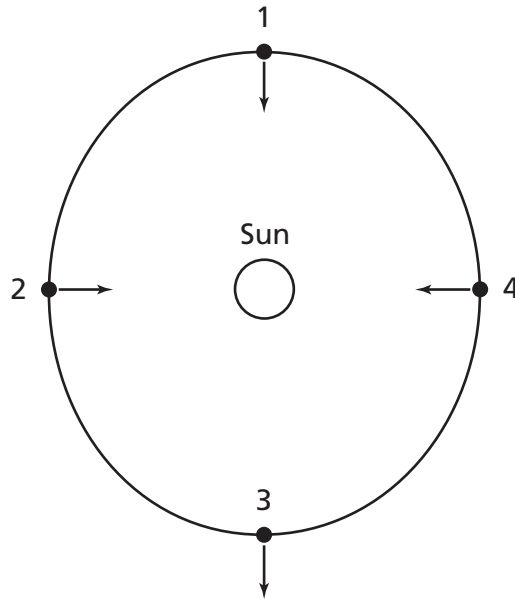
	1																	18	
1	1 H 1.00	2												13 B 10.81	14 C 12.01	15 N 14.01	16 O 16.00	17 F 19.00	2 He 4.00
2	3 Li 6.94	4 Be 9.01																	10 Ne 20.18
3	11 Na 22.99	12 Mg 24.31	3	4	5	6	7	8	9	10	11	12		13 Al 26.98	14 Si 28.09	15 P 30.97	16 S 32.07	17 Cl 34.45	18 Ar 39.95
4	19 K 39.10	20 Ca 40.08	21 Sc 44.96	22 Ti 47.88	23 V 50.94	24 Cr 52.00	25 Mn 54.94	26 Fe 55.85	27 Co 58.93	28 Ni 58.69	29 Cu 63.55	30 Zn 65.39	31 Ga 69.72	32 Ge 72.61	33 As 74.92	34 Se 78.96	35 Br 79.90	36 Kr 83.80	

Which element from Period 2 has the lowest atomic mass?

- A** Li
- B** Be
- C** Ca
- D** Ne

24

A student drew a diagram of Earth at four different points in its orbit around the sun. The student drew arrows to represent the direction of the gravitational force of the sun on Earth.



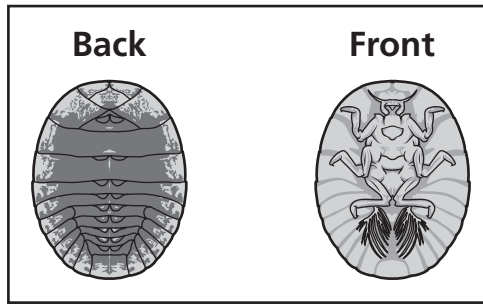
Which arrow did the student draw incorrectly?

- F** 1
- G** 2
- H** 3
- J** 4

- 25** A student built a prototype of an electromagnet. The electromagnet was designed to produce a strong magnetic field. How can the student best test the strength of the electromagnet?
- A** place a thermometer near the electromagnet, and record changes in the air temperature surrounding the electromagnet
 - B** connect the electromagnet to a simple circuit that contains a battery and light bulb, and then observe if the bulb glows
 - C** attach an iron bar to a spring scale, place the iron bar near the electromagnet, and record the force reading on the spring scale
 - D** place the electromagnet on an electronic balance, and record its mass in kilograms

- 26** A student tests the pH of a container of milk. The pH of the milk is 5. How will the milk most likely taste?
- F** sweet
 - G** salty
 - H** bitter
 - J** sour

- 27** An organism and a classification key are shown below.



- | | |
|--------------------------------------|----------------|
| 1. Long segmented body | go to 2 |
| Oval-shaped, segmented body..... | go to 4 |
| 2. No legs | earthworm |
| Many legs | go to 3 |
| 3. One pair of legs per segment..... | centipede |
| Two pairs of legs per segment | millipede |
| 4. No tail | water penny |
| Tail..... | horseshoe crab |

Based on the key, what organism is shown?

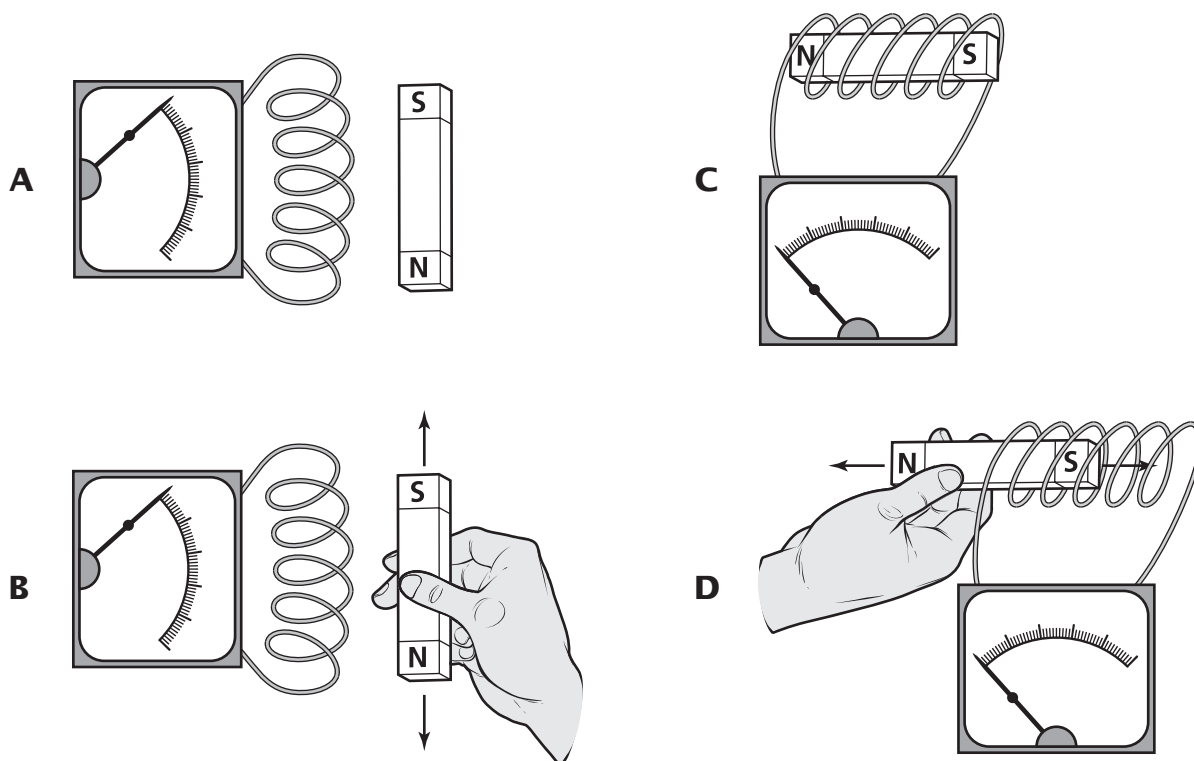
- A** earthworm
- B** centipede
- C** water penny
- D** horseshoe crab

- 28** Which of these characteristics do the elements sodium, mercury and oxygen have in common under all conditions?

- F** They are all made up of atoms.
- G** They all have the same atomic number.
- H** They all have the same mass.
- J** They are all gases.

Go On ►

- 29** A student has a magnet and wire coil. Which diagram best shows how the student can use the magnet and wire coil to produce electricity?



- 30** The chemical process of burning coal produces energy and ash. The ash produced is best described as a

- F** new state of matter.
- G** new type of element.
- H** substance with properties identical to coal.
- J** substance with properties different from coal.

31

A muskox is a large, heavy mammal. It has short legs and is covered in long, thick hair. A muskox is shown in the picture below.



Based on its characteristics, in which environment is a population of muskox best suited to live?

- A** tundra
- B** desert
- C** wetland
- D** rain forest

32

Which two gases make up the greatest percentage of the atmosphere of Earth?

- F** oxygen and nitrogen
- G** nitrogen and carbon dioxide
- H** oxygen and water vapor
- J** carbon dioxide and water vapor

Go On ►

33 Which of these is a compound?

- A** Zn
- B** Xe
- C** N₂O
- D** H₂

34 A student made an electromagnet by wrapping copper wire around an iron nail. The student then connected each end of the electromagnet to the opposite terminals of a battery. The electromagnet will best function as a magnet as long as

- F** electric current flows through the wire.
- G** electrical energy is transformed into mechanical energy.
- H** electrical energy is transformed into potential energy.
- J** electric current flows through the nail.

35 An emergency-equipment company makes warning-signal flares. The company wants to redesign a flare so that it produces light for a longer period of time. After the company thinks of ideas, what is the next step in the design process?

- A** build a prototype
- B** improve the product
- C** decide on the best improvement
- D** define the problem

STOP 

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PAGE**

Part 2

36 Which statement best compares the magnetic field of Earth to the magnetic field of a bar magnet?

- F** Magnetic field lines around Earth are symmetrical but magnetic field lines around a bar magnet are not symmetrical.
- G** Magnetic field lines around Earth are in a circular pattern but magnetic field lines around a bar magnet extend away from the magnet.
- H** Magnetic field lines for both Earth and a bar magnet are generated from convection currents.
- J** Magnetic field lines for both Earth and a bar magnet emerge from their north poles.

37 Which of these is a compound and not a mixture?

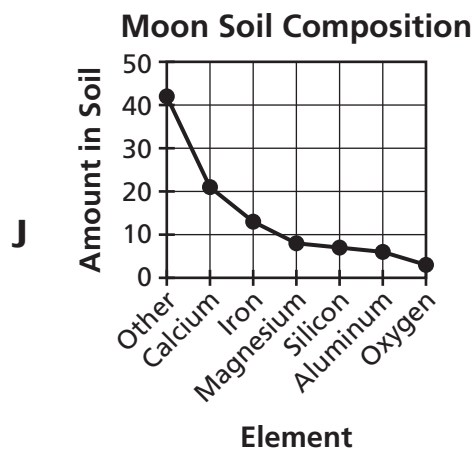
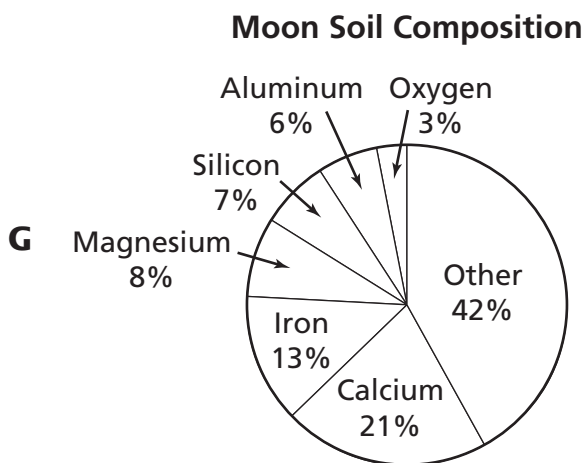
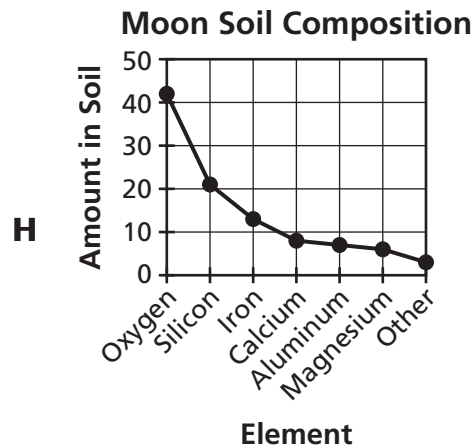
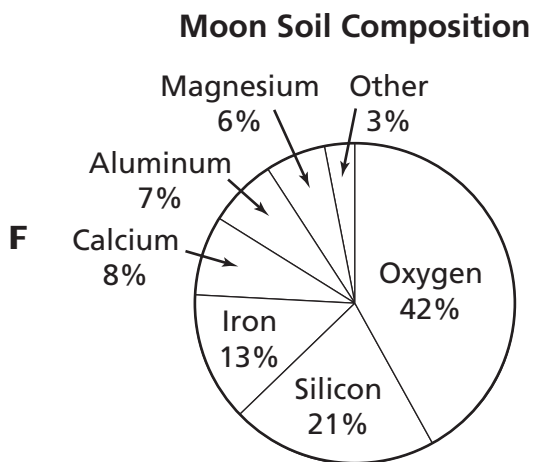
- A** chocolate milk
- B** table salt
- C** vinegar with oil
- D** sand in water

The table below shows the relative amount of elements in soil from the moon.

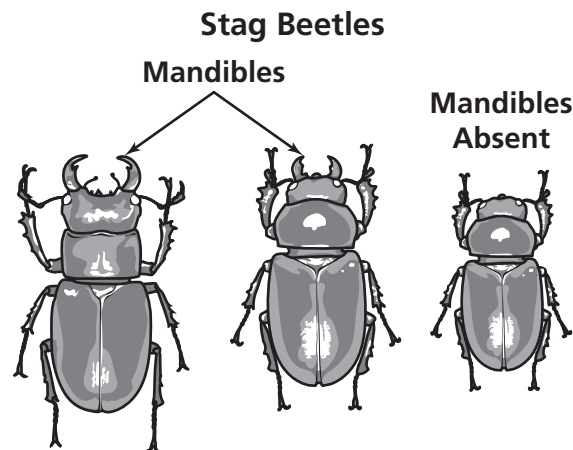
Moon Soil Composition

Element	Relative Amount
Oxygen	42%
Silicon	21%
Iron	13%
Calcium	8%
Aluminum	7%
Magnesium	6%
Other	3%

Which graph best shows the data from the table?



The picture below shows male stag beetles that have different mandible types.



Male beetles with large mandibles are best at guarding burrows where females have laid eggs. Males whose mandibles are absent are best at digging alternate entrances to a guarded burrow to reach females. The table below shows the number of male stag beetles with different mandible types in one population.

**Male Stag Beetles
in Population**

Mandible Type	Number of Males
Absent	10
Small	8
Medium	9
Large	10

Based on this information, which two mandible types will probably become less common in this population over time?

- A** Absent and Small
- B** Absent and Medium
- C** Large and Medium
- D** Small and Medium

40 A strip of magnesium burns at a temperature of about 2220°C . Burning magnesium produces a brilliant white light and leaves behind a white powder known as magnesium oxide. Which best explains why the burning of magnesium results in a chemical reaction?

- F** A new substance is formed.
- G** A temperature increase occurred.
- H** The appearance of the magnesium strip changed.
- J** The state of matter of the magnesium strip changed.

41 A substance has particles that are close together with no regular arrangement. The particles vibrate and slide past each other. The substance is difficult to compress and flows easily. This substance is most likely a

- A** solid.
- B** liquid.
- C** gas.
- D** plasma.

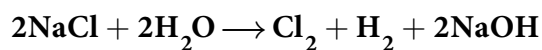
42 In which of these situations will an object become less massive?

- F** Matter is removed from the object.
- G** Heat changes the physical state of the object.
- H** The object is weighed on the moon instead of on Earth.
- J** The object is measured on a scale instead of a balance.

43 Fertilizers containing phosphorous and nitrogen are leached into a pond. The nutrients from the fertilizer cause algae colonies in the pond to grow rapidly. As large quantities of algae die, the pond water becomes depleted of oxygen. What will most likely happen to the pond next?

- A** A greater number of organisms will live in the pond.
- B** There will be less biodiversity in the pond.
- C** The water will become more clear.
- D** The depth of the pond will increase.

44 A chemical equation is shown below.



Which substance is a reactant?

- F** NaCl
- G** Cl
- H** H₂
- J** NaOH

- 45** An object has a mass of 20 grams and a density of 2 grams per cubic centimeter.

$$\text{Volume} = \frac{\text{Mass}}{\text{density}}$$
$$V = \frac{m}{d}$$

What is the volume of the object?

- A** 10 cubic centimeters
- B** 18 cubic centimeters
- C** 22 cubic centimeters
- D** 40 cubic centimeters

- 46** If Earth and Jupiter were the same distance away from the sun, which planet would have a greater gravitational attraction to the sun and why?

- F** Jupiter would have a greater gravitational attraction to the sun, because Jupiter is more massive than Earth.
- G** Jupiter would have a greater gravitational attraction to the sun, because Jupiter has a larger volume than Earth.
- H** Earth would have a greater gravitational attraction to the sun, because Earth has a greater density than Jupiter.
- J** Earth would have a greater gravitational attraction to the sun, because Earth has a higher average temperature than Jupiter.

- 47** The table below contains weather data for two cities.

Average Monthly Temperatures

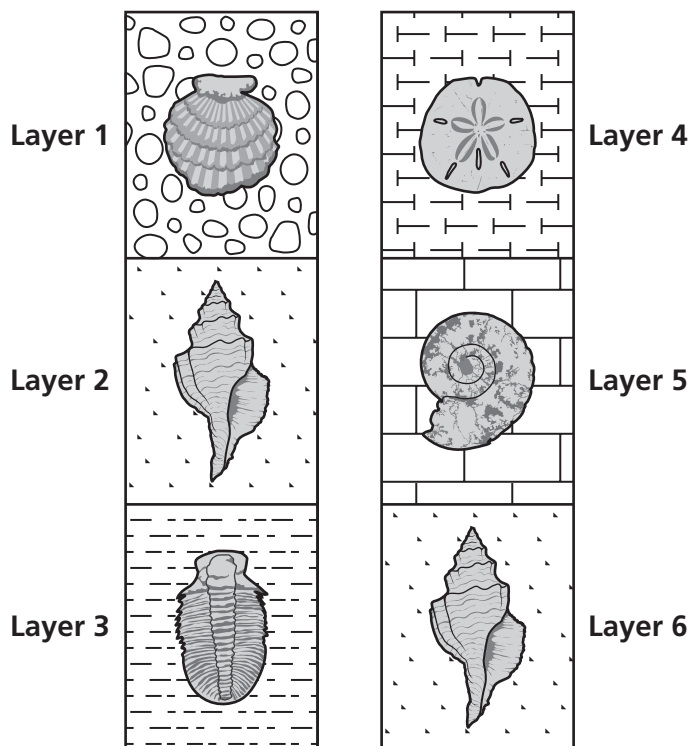
Month	City X Temperature (°C)	City Y Temperature (°C)
January	−6	10
February	−3	12
March	3	16
April	9	21
May	15	24
June	21	28
July	23	29
August	22	29
September	18	26
October	12	21
November	4	16
December	−3	11

Which conclusion is best supported by the data in the table?

- A** City X has lower wind speeds than City Y.
- B** City X has higher humidity than City Y.
- C** City X is further from the equator than City Y.
- D** City X receives more rainfall than City Y.

48

Two geologic columns are shown below. The columns are from areas about 1 kilometer apart.



Which layers were most likely deposited at the same time?

- F** Layers 1 and 4
- G** Layers 2 and 3
- H** Layers 3 and 4
- J** Layers 2 and 6

49

Which equation best represents the law of conservation of mass?

- A** $\text{N}_2 + \text{O}_2 \rightarrow \text{N}_2\text{O}$
- B** $\text{N}_2 + 2\text{O}_2 \rightarrow \text{N}_2\text{O}$
- C** $2\text{N}_2 + \text{O}_2 \rightarrow 2\text{N}_2\text{O}$
- D** $2\text{N}_2 + 2\text{O}_2 \rightarrow 2\text{N}_2\text{O}$

Go On ►

A periodic table of the elements is shown below.

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1	1 H 1.0	IIA 2																	2 He 4.0	
	3 Li 6.9	4 Be 9.0												5 B 10.8	6 C 12.0	7 N 14.0	8 O 16.0	9 F 19.0	10 Ne 20.2	
2	11 Na 23.0	12 Mg 24.3												13 Al 27.0	14 Si 28.0	15 P 31.0	16 S 32.0	17 Cl 35.5	18 Ar 40.0	
	VIII B																			
3	19 K 39.1	20 Ca 40.1	21 Sc 45.0	22 Ti 48.0	23 V 50.9	24 Cr 52.0	25 Mn 54.9	26 Fe 55.8	27 Co 58.9	28 Ni 58.7	29 Cu 63.5	30 Zn 65.4	31 Ga 69.7	32 Ge 72.6	33 As 74.9	34 Se 79.0	35 Br 79.9	36 Kr 83.8		
	37 Rb 85.5	38 Sr 87.6	39 Y 88.9	40 Zr 91.2	41 Nb 92.9	42 Mo 95.9	43 Tc 98.0	44 Ru 101.1	45 Rh 102.9	46 Pd 106.4	47 Ag 107.9	48 Cd 112.4	49 In 114.8	50 Sn 118.7	51 Sb 121.8	52 Te 127.6	53 I 126.9	54 Xe 131.3		
4	55 Cs 132.9	56 Ba 137.3	57-71	72 Hf 178.5	73 Ta 181.0	74 W 183.9	75 Re 186.2	76 Os 190.2	77 Ir 192.2	78 Pt 195.1	79 Au 197.0	80 Hg 200.6	81 Tl 204.4	82 Pb 207.2	83 Bi 209.0	84 Po 209.0	85 At 210.0	86 Rn 222.0		
	87 Fr 223.0	88 Ra 226.0	89-103	104 Rf 261	105 Db 262	106 Sg 263	107 Bh 262	108 Hs 265	109 Mt 266											
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Based on their locations on the periodic table, which two elements share the most similar chemical properties?

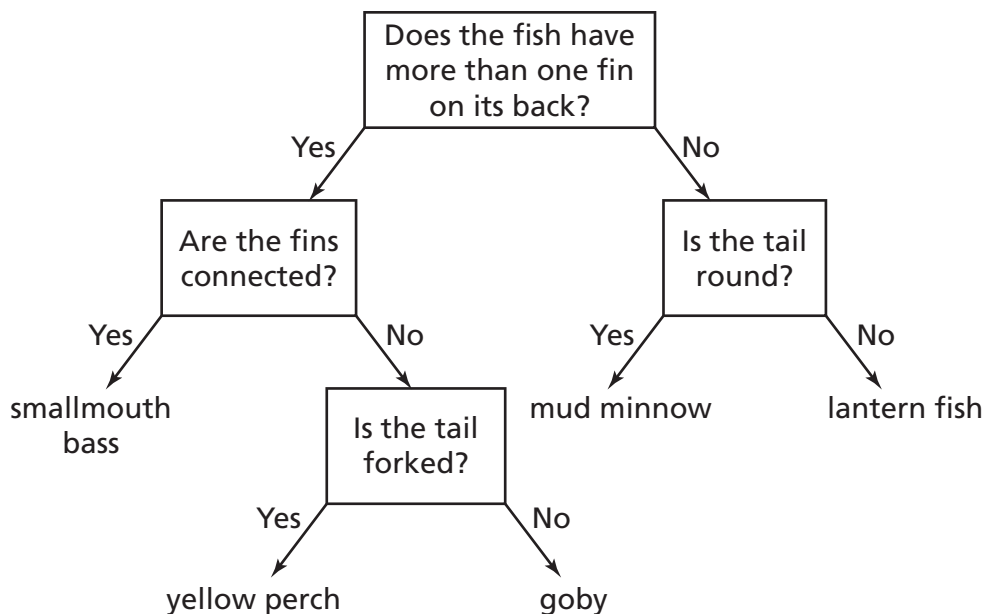
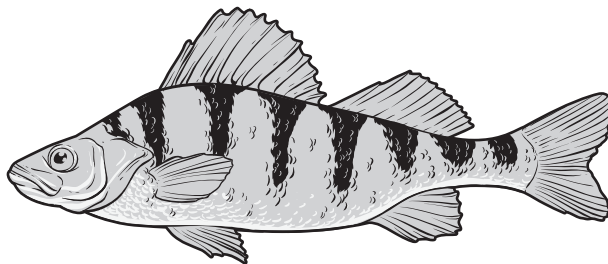
- | | |
|----------|-----------|
| F | K and Kr |
| G | Be and Ba |
| H | S and Sn |
| J | H and I |

51 Which of these is directly affected by gravity?

- A** the rotation of Earth on its axis
- B** the orbit of the moon around Earth
- C** the magnetic field surrounding Earth
- D** the production of oxygen in Earth's atmosphere

Go On ►

A fish and a dichotomous key are shown below.



According to the dichotomous key, which fish is pictured?

F smallmouth bass

G yellow perch

H goby

J lantern fish

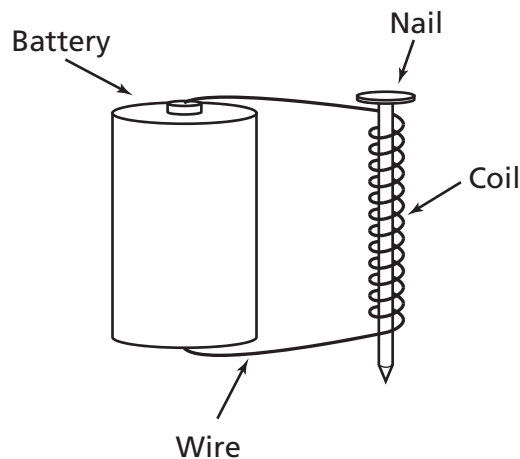
53 Acids and bases have different properties. As opposed to an acid, a base is most likely to

- A** have a sour taste.
- B** react with a metal and produce hydrogen gas.
- C** react with limestone and produce carbon dioxide.
- D** feel slippery when mixed with water.

54 Which of these is made of atoms?

- F** sunlight
- G** oxygen gas
- H** a radio wave
- J** an X-ray

- 55** A student builds the electromagnet shown in the diagram below.



How can the student increase the strength of the magnetic field around the electromagnet?

- A** Remove the nail from within the coil.
- B** Use a wire with a smaller diameter.
- C** Increase the number of loops in the coil.
- D** Move the battery closer to the nail.

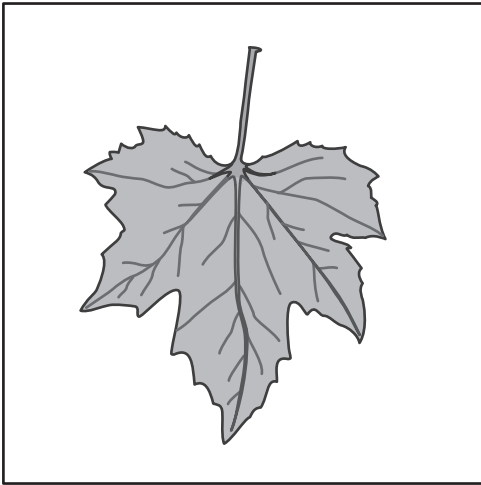
- 56** Which of these is most likely an unintended consequence of building a dam on a river to generate hydroelectric energy?

- F** less greenhouse gases in the atmosphere
- G** more electricity available for consumers
- H** polluting the water with hazardous chemicals
- J** disturbing the life cycles of certain types of fish

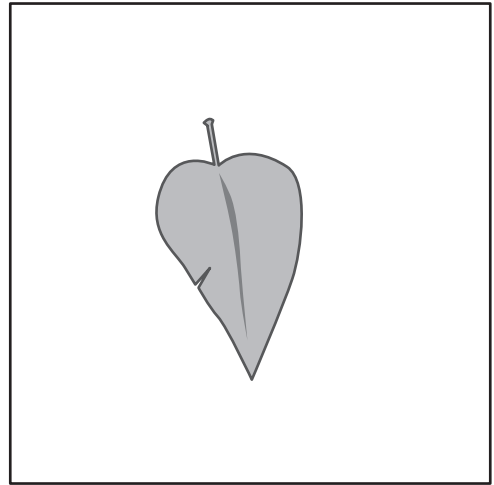
57

Which diagram most likely shows an adaptation that increases the chances of survival of a plant in a hot, dry climate?

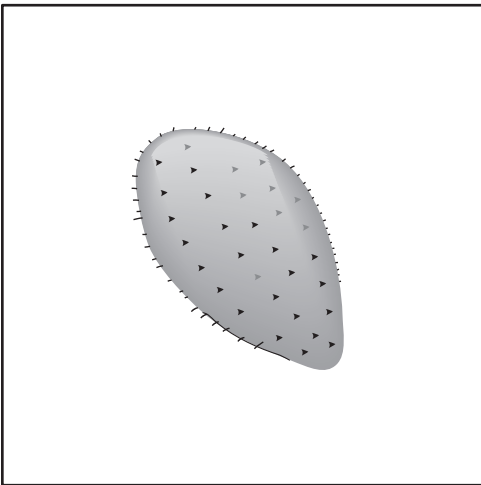
A



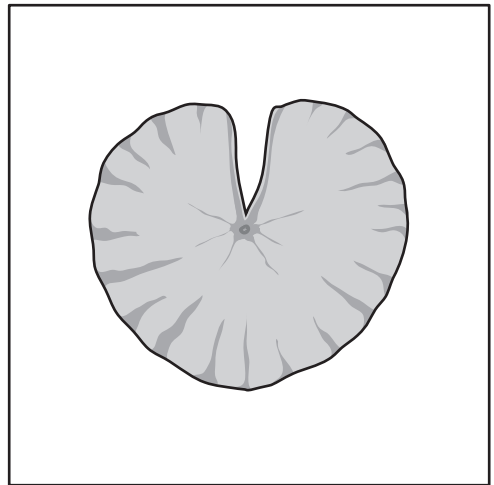
C



B



D



Go On ►

58

A student is classifying the two substances shown below based on their chemical formulas.



Which correctly classifies these substances?

- F** Both H_2O and O_2 are elements.
- G** Both H_2O and O_2 are compounds.
- H** H_2O is a compound and O_2 is an element.
- J** H_2O is an element and O_2 is a compound.

59

Each particle in a sample of matter vibrates but does not move from its location. In what state of matter is the sample?

- A** liquid
- B** solid
- C** gas
- D** plasma

60 Which statement best compares a permanent magnet and an electromagnet?

- F** A permanent magnet has a north pole and a south pole, but an electromagnet only has a south pole.
- G** A permanent magnet has a fixed magnetic field strength but the magnetic field strength of an electromagnet can be changed.
- H** A permanent magnet requires an external source of energy, but an electromagnet produces its own energy.
- J** The magnetic field lines from a permanent magnet emerge from the north pole, but they emerge from the south pole of the electromagnet.

61 A population of grasses originally had equal amounts of three different genotypes for seed production (GG, Gg and gg). After five generations, the percent of each genotype changed, as shown in the table below.

Seed Production over Time

Grass Genotype	Original Percent of Population	Percent of Population after Five Generations
GG	33.3%	55.0%
gg	33.3%	40.0%
Gg	33.3%	5.0%

Which statement describes the most likely reason for the changes in the plant population?

- A** Plants with genotype Gg produced significantly fewer seeds than genotypes GG or gg.
- B** Plants with genotype GG produced seeds that were unable to grow into plants.
- C** Plants with genotype Gg produced a similar number of seeds to genotype GG and gg.
- D** Plants with genotype gg produced the greatest number of seeds.

62 Two students work on different substances in a science lab. Student 1 has a mixture and Student 2 has a compound. Both students will separate the parts of their substances. Which best describes a result of the separation processes?

- F** Only the mixture will go through a chemical change.
- G** Only the mixture will release heat when the parts are separated.
- H** Each part of the compound will gain mass during separation.
- J** Each part of the compound will have different chemical properties.

63 A student measured the volumes of four wooden blocks and recorded the data in the table below. Each block has a density of 0.5 gram per cubic centimeter.

Block Volumes

Block	Volume (cubic centimeters)
1	25
2	100
3	50
4	200

$$\text{mass}(m) = \text{density}(d) \times \text{Volume}(V)$$

Which block has a mass of 50 grams?

- A** 1
- B** 2
- C** 3
- D** 4

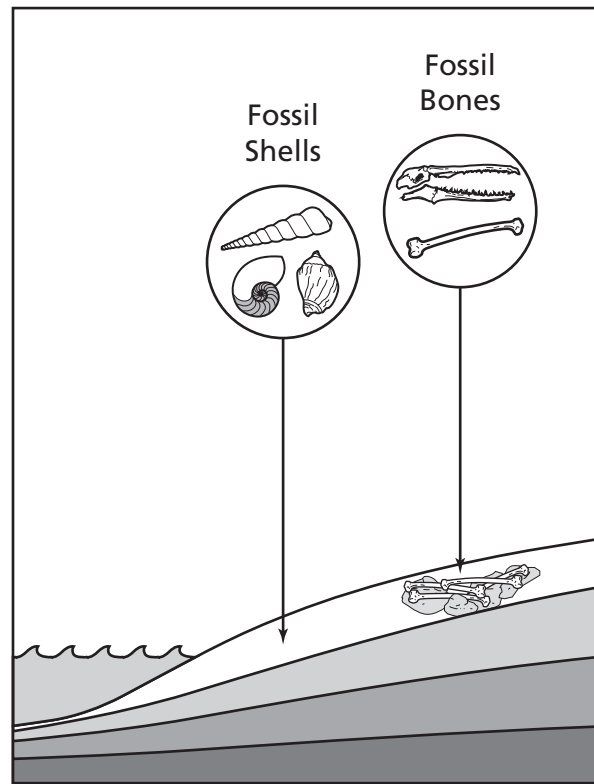
64 Which property of an object will be different on the moon than it is on Earth?

- F** chemical structure
- G** mass
- H** pH level
- J** weight

65 A runner has a watch that can measure the time, distance, and speed of a run. Which statement best explains why this type of watch can be considered an adaptive technology?

- A** This type of watch is only useful to runners.
- B** This type of watch is a modification of an existing technology.
- C** This type of watch uses disposable batteries.
- D** This type of watch provides a substitute for expensive technology.

Scientists discovered fossils at two locations, as shown in the diagram below.

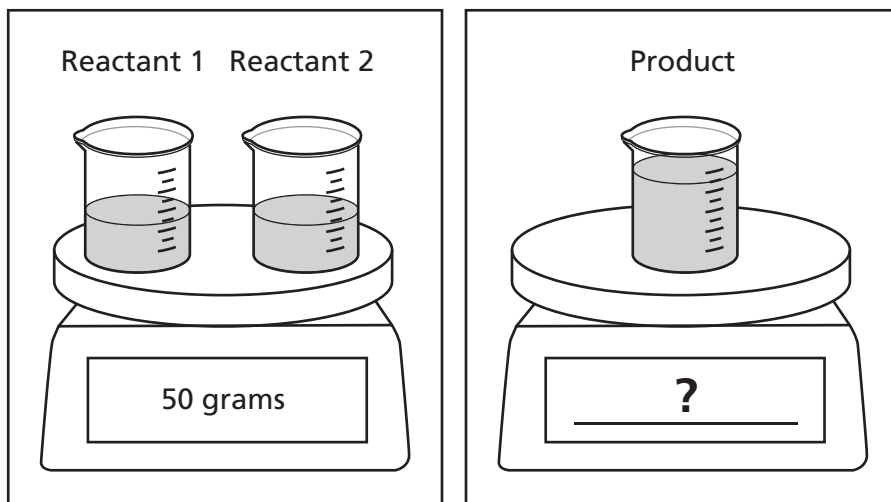


The scientists concluded that the fossils at these locations were approximately the same age. Which evidence would best support this conclusion?

- F** Both locations contained a similar number of fossil types.
- G** Both locations were above layers containing different types of plant fossils.
- H** Both locations contained the same type of mineral formations.
- J** Both locations were part of the same layer of sedimentary rock.

67

Students have two identical beakers with a mass of 20 grams each. The students pour a different liquid reactant into each beaker. The total mass of the two beakers with the reactants is 50 grams. Next, the students combine Reactant 1 and Reactant 2 into one of the beakers. A chemical reaction produces a product.



If all of the reactants are consumed and no gases are produced, what is the total mass of the product and one beaker?

- A** 20 grams
- B** 30 grams
- C** 40 grams
- D** 70 grams

Go On ►

- 68** A group from the periodic table of elements is shown below.

17
9 F 19.00
17 Cl 35.45
35 Br 79.90
53 I 126.90
85 At (210)

What is the atomic number of fluorine (F)?

- F** 9
- G** 10
- H** 17
- J** 19
- 69** Which object can a student move through a coil of copper wire to produce an electric current in the wire?
- A** battery
- B** magnet
- C** steel rod
- D** litmus paper

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Social Studies



Part 1

1 Study the list below.

- Emigrated because of a potato famine
- One of the first groups of Catholic immigrants to the United States

Which cultural group is best described by the list?

- A** Russians
- B** Italians
- C** British
- D** Irish

2 Which result did the introduction of interchangeable parts have on the American colonial culture?

- F** increased production of tobacco
- G** allowed mass production of weaponry
- H** improved access to transportation
- J** increased development of canal system

Go On ►

3 Study the information below.

No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury . . . nor shall be deprived of life, liberty, or property, without due process of law. . .

Which document contains the protections listed above?

- A** Declaration of Independence
- B** Articles of Confederation
- C** Mayflower Compact
- D** Bill of Rights

4 During the 1800s, which group was best known for assisting runaway slaves in the United States?

- F** Quakers
- G** plantation owners
- H** Puritans
- J** Southern politicians

5 Study the information below.

Natural Resources Native to the Americas

- Sweet potatoes
- Peanuts
- _____ ?

Which food best completes the list?

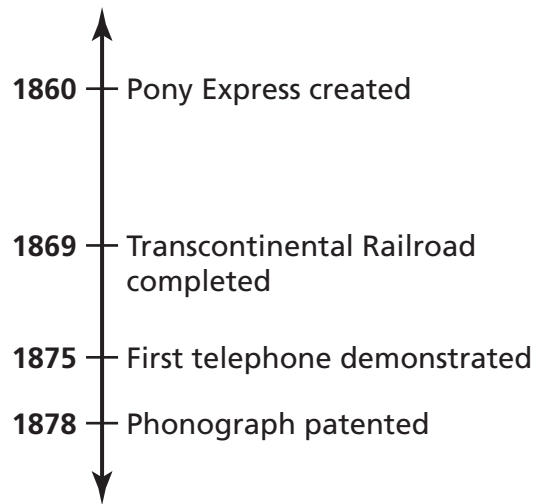
- A** Olives
- B** Cacao
- C** Millet
- D** Bananas

6 Which religious idea was shared by Puritans and Quakers?

- F** belief in the spirit world
- G** worship of ancestors
- H** belief in one god
- J** acceptance of other faiths

7 Study the timeline below.

**Innovations Impacting Society,
1860 – 1878**



Based on this timeline, in which year was the speed of communication most affected?

- A** 1860
- B** 1869
- C** 1875
- D** 1878

8 Religion is best defined as a

- F** group of shared beliefs.
- G** system of creating customs.
- H** group of similar individuals.
- J** system of selecting leaders.

9 Which colony promoted religious freedom for all?

- A** Virginia
- B** Massachusetts
- C** Pennsylvania
- D** Georgia

10 Which factor most encouraged the growth of slavery in the South?

- F** Moderate climates allowed for long growing seasons.
- G** Settlers had begun the development of fishing industries.
- H** Factory jobs attracted large numbers of new immigrants.
- J** Soil conditions led to an increased number of small farms.

11 Study the information.

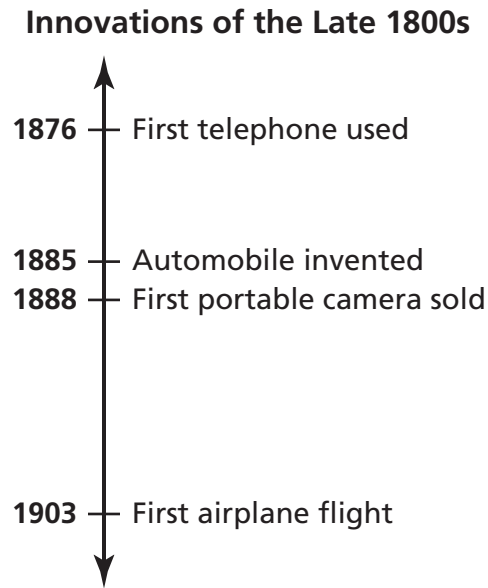
- Citizens vote for representatives to make laws

Which system of government is best described by this information?

- A** federalism
- B** dictatorship
- C** republic
- D** monarchy

Go On ►

12 Study the timeline below.



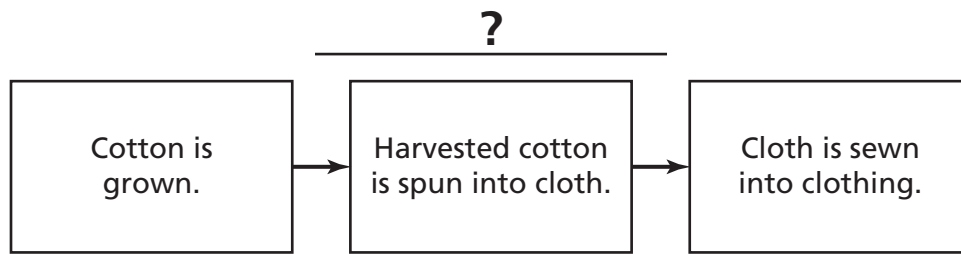
During which year were Americans first able to communicate verbally over long distances?

- F** 1876
- G** 1885
- H** 1888
- J** 1903

13 In the early 19th century, a major reason people migrated in the United States was the

- A** passage of the Alien and Sedition Acts.
- B** sale of federal land to citizens.
- C** requirement of literacy tests to vote.
- D** announcement of the Monroe Doctrine.

14 Study the diagram below.



Which title would best replace the question mark in the diagram?

- F** Changing a Resource into a Product
- G** Invention of a New Technology
- H** Stages of Industrialization
- J** Shifting from Rural to Urban Markets

15 Which document gave Congress the right to declare war against a foreign country?

- A** Mayflower Compact
- B** Declaration of Independence
- C** Articles of Confederation
- D** Constitution of the United States

Go On ►

16 Study the information below.

- Negotiated a treaty with Great Britain to annex Oregon
- Led the United States into war with Mexico

Which president is best described by the information in the list?

- F** Andrew Jackson
- G** John Q. Adams
- H** Martin Van Buren
- J** James K. Polk

17 Study the pictures below.

New Orleans, Louisiana



Richmond, Virginia

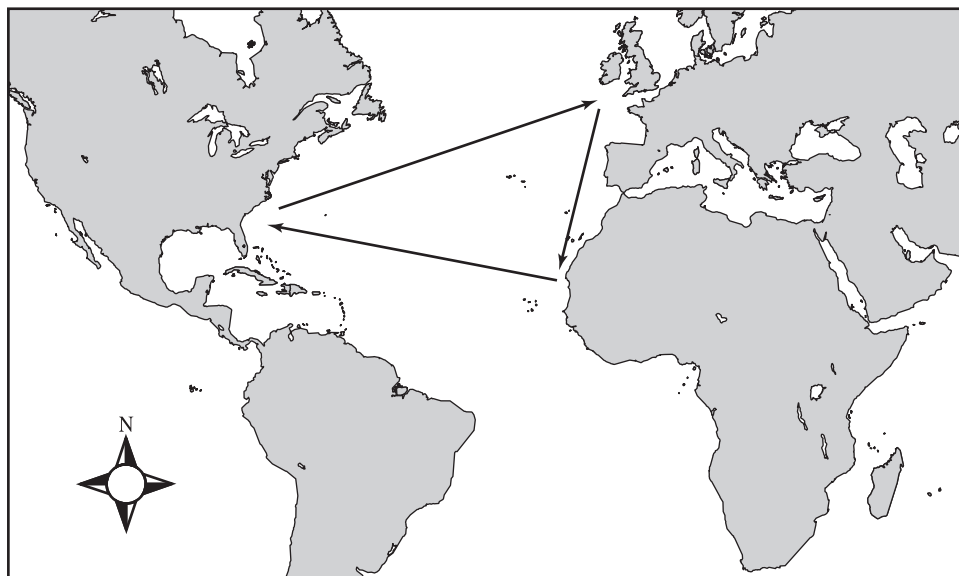


Which factor best accounts for the differences in the structures?

- A** cultural influences of Native Americans and the Spanish
- B** federal government funding of local buildings
- C** architectural influences of the French and the British
- D** community group support of historic places

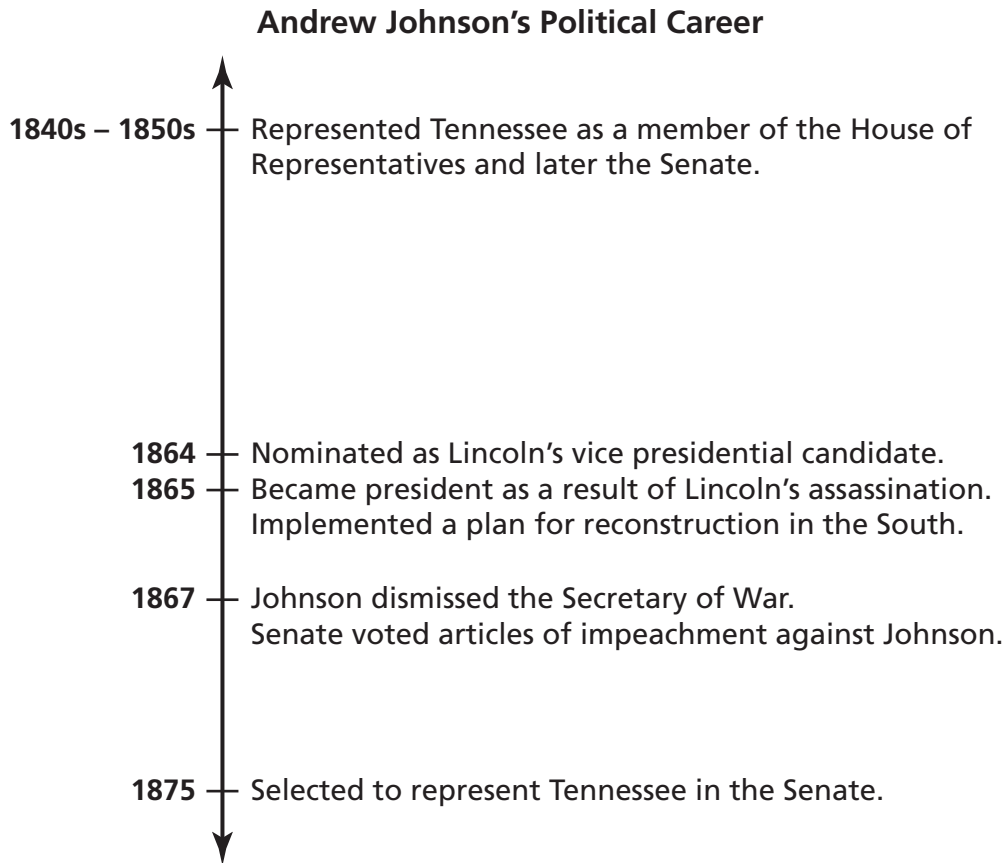
18 Study the trade pattern below.

Triangular Trade



This trade pattern helped develop a distinctive economy in the South by supplying

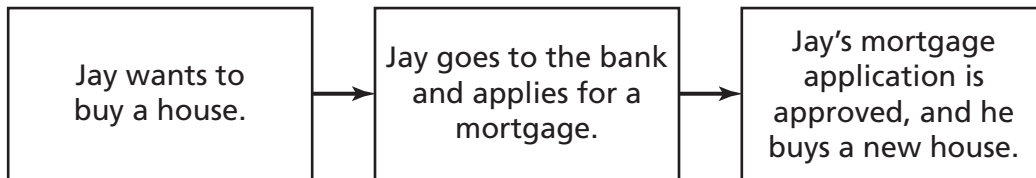
- F** merchants with precious metals.
- G** plantation owners with slave laborers.
- H** factory owners with raw materials.
- J** governments with tax revenues.



Based on the timeline, which event occurred after Johnson implemented plans for reconstruction in the South?

- A** Johnson was nominated as Lincoln's vice presidential candidate.
- B** Johnson dismissed the Secretary of War.
- C** Johnson became president of the United States.
- D** Johnson served as a member of the House of Representatives.

20 Study the information below.



Based on the information, how is Jay paying for his house?

- F** by trading goods
- G** by using credit
- H** by using his savings
- J** by providing a service

21 Study the list below.

_____ ?

- Register to vote
- Obey laws
- Serve on a jury

Which title best replaces the question mark?

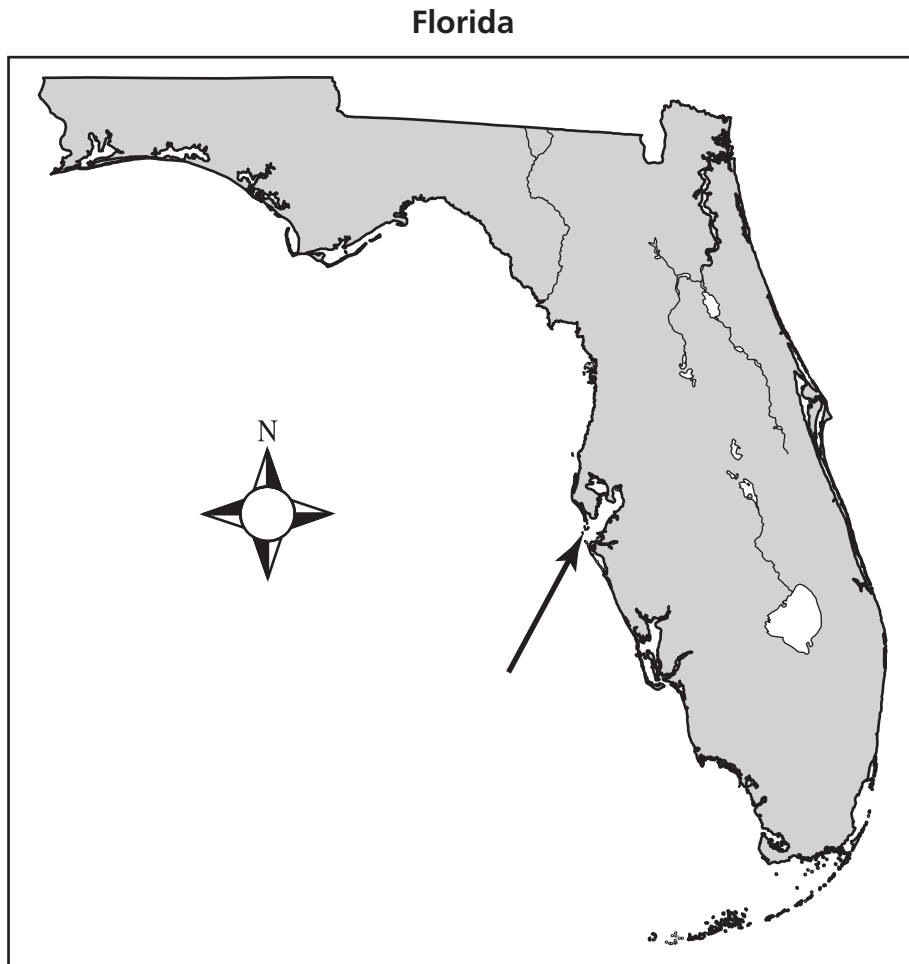
- A** Responsibilities of a Citizen
- B** Rights Protected by the Constitution
- C** Duties of a Civil Servant
- D** Freedoms Guaranteed by the Bill of Rights

22 Which item is the best example of a primary source from the Civil War?

- F** a letter written by a soldier during the Siege of Vicksburg
- G** a newspaper article reviewing a film about the Battle of Gettysburg
- H** biography of a slave escaping to the North
- J** a museum timeline of events leading to the secession of South Carolina

23

Study the map below.



Which geographical feature is identified by the arrow on this map?

- A** bay
- B** oasis
- C** hill
- D** gulf

Go On ►

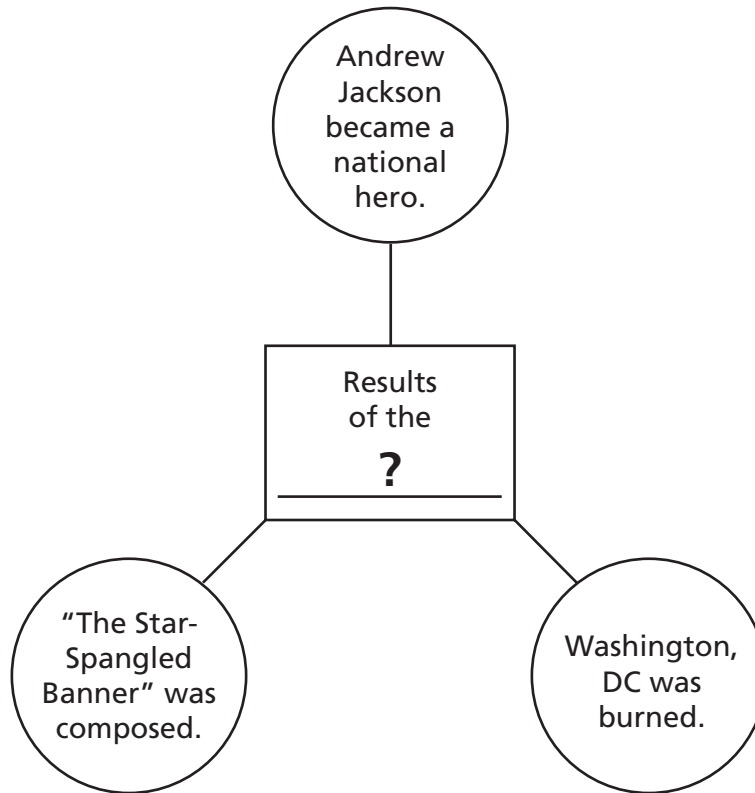
24 Study the map below.



Which factor influenced the migration shown on the map?

- F** Native Americans moved to escape religious persecution from European colonists.
- G** Native Americans moved to settle new lands away from colonial intrusions.
- H** Native Americans were displaced by African slaves brought to work on southern plantations.
- J** Native Americans were displaced because the government needed land for new settlements.

25 Study the diagram below.



Which event best replaces the question mark in the diagram?

- A** Civil War
- B** Mexican-American War
- C** French and Indian War
- D** War of 1812

26 Study the excerpt below.

Since great waste [uninhabited] woods be there of oak, cedar, pine, walnuts, and sundry other sorts, many of our [extra] people may be employed in making of ships, hoys, busses, and boats, and in making of rosin, pitch, and tar . . .

— Richard Hakluyt, 1585

Based on the excerpt, which early American economic activity is described?

- F** producing agricultural goods
- G** using available resources to engage in industry
- H** constructing colonial settlements
- J** harvesting materials to barter with native peoples

27 Which issue directly led to the start of the American Revolution?

- A** the admission of new colonies
- B** the increase in taxes on imported products
- C** the impressment of sailors by the British navy
- D** the establishment of forts in the Ohio River valley

28 Study the information below.

According to the National Inventory of Dams, as of 2009 there were over 84,000 dams within the borders of the United States.

— US Army Corps of Engineers

What effect did the construction of these dams most likely have on the surrounding environments?

- F** destruction of animal habitats
- G** protection of natural resources
- H** decrease in water pollution
- J** expansion of urban areas

29 Study the table below.

Comanche	Natchez
<ul style="list-style-type: none">• Lived on the Great Plains• Relied on nomadic hunting	<ul style="list-style-type: none">• Lived in the Southeast• Relied on farming

Which conclusion can be made based on the information in the table?

- A** The Natchez were more dependent on farming than the Comanche.
- B** The Comanche were more susceptible to diseases than the Natchez.
- C** The villages of the Natchez were farther apart than the Comanche villages.
- D** The Comanche and Natchez warriors hunted buffalo to near extinction.

30 What was one consequence that resulted from the westward expansion of the United States?

- F** The population increased east of the Appalachian Mountains.
- G** Groups of Native Americans were forced onto reservations.
- H** The economy of the North transitioned from agricultural to industrial.
- J** Immigration from European countries steadily decreased.

31 Study the information below.

When Alexander Hamilton was Secretary of the Treasury, he urged Congress to pass a tariff on foreign goods.

What was the most likely purpose of this tariff?

- A** to promote American trade with other countries
- B** to strengthen industries in the United States
- C** to decrease consumer prices in the United States
- D** to reduce the focus on American agriculture

32 Study the photograph below.

Scene from a Trial



Which amendment requires the conditions shown in the photograph?

- F** Second Amendment
- G** Third Amendment
- H** Sixth Amendment
- J** Tenth Amendment

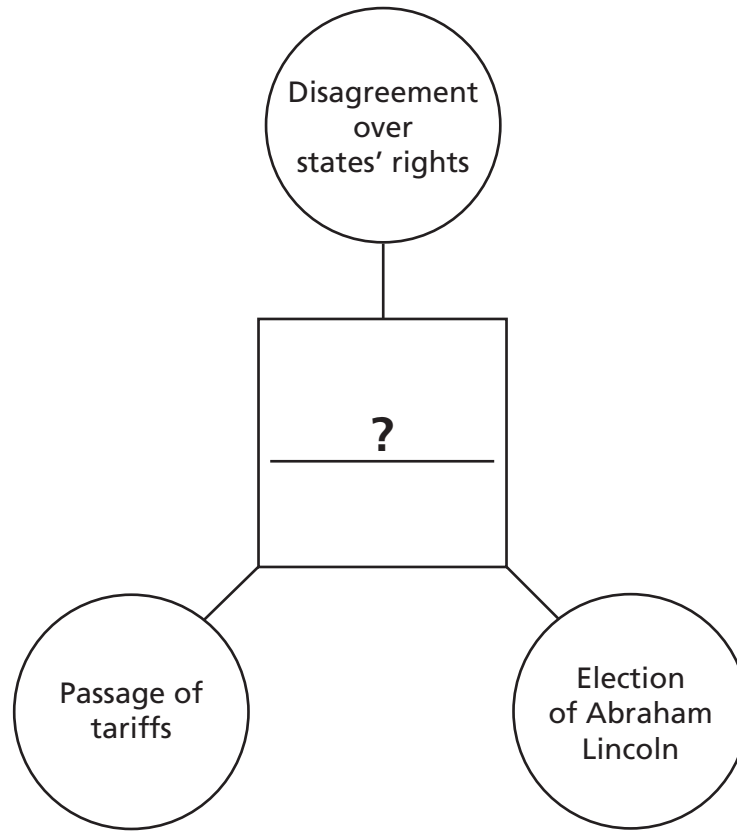
33 Study the map below.



Based on the map, what is the approximate distance between Monterrey and Mexico City?

- A** 200 miles
- B** 400 miles
- C** 600 miles
- D** 800 miles

34 Study the diagram below.



Which statement best replaces the question mark in the diagram?

- F** Effects of Secession and the Civil War
- G** Causes for Secession and the Civil War
- H** Effects of Westward Expansion
- J** Causes for Westward Expansion



Which major event occurred after the first family traveled the Oregon Trail?

- A** Lewis and Clark lead an expedition to the Pacific Ocean.
- B** Jefferson purchases the Louisiana Territory.
- C** Gold is discovered in California.
- D** Americans begin to use the Santa Fe Trail.

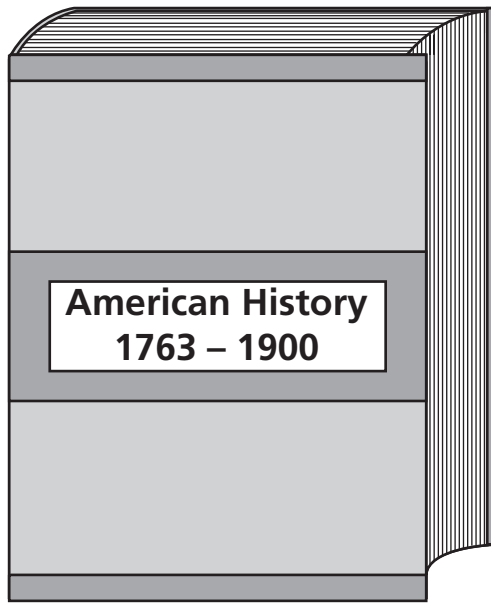
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Part 2

36 Which statement describes an economic factor that contributed to the growth of slavery during the early 1800s?

- F** the growth of the shipbuilding industry in Pennsylvania
- G** the closing of the Second Bank of the United States
- H** the completion of the First Transcontinental Railroad
- J** the demand for cotton by textile mills in New England

37 Study the secondary source below.



This book would be considered a secondary source because it is

- A** a collection of information on a particular subject.
- B** a person's daily record of events.
- C** an account of a person's life recorded by that person.
- D** an official record that legally establishes a fact.

38 Study the quote below.

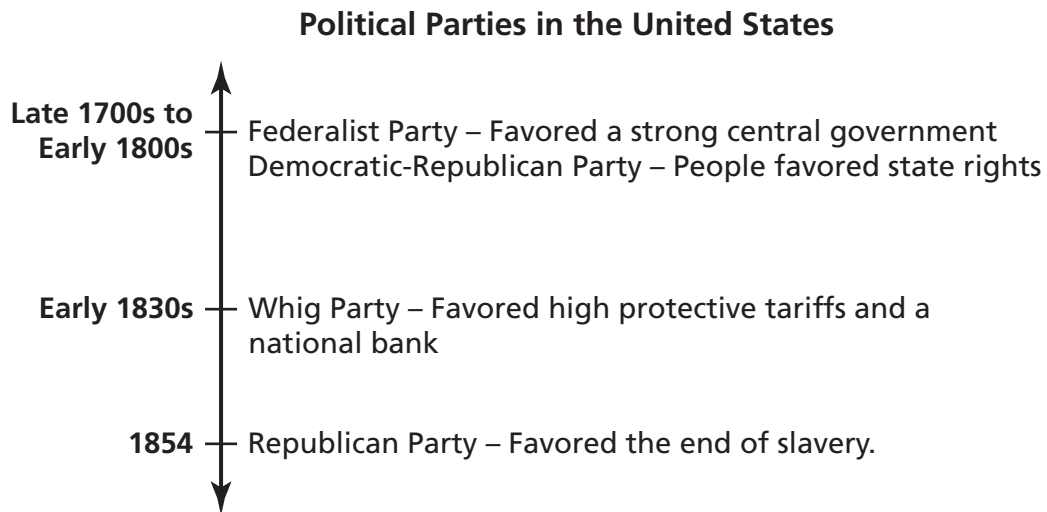
A Law repugnant [opposed] to the Constitution is void.

— Chief Justice John Marshall

Which Supreme Court decision is best associated with the quote?

- F** *Gibbons v. Ogden*
- G** *Marbury v. Madison*
- H** *McCulloch v. Maryland*
- J** *Dred Scott v. Sandford*

39 Study the timeline below.



Based on the timeline, which factor had the greatest influence on political parties in the United States?

- A** the need for a strong military
- B** the desire to protect jobs from foreign immigrants
- C** the need to define geographic borders
- D** the desire for current views to be represented in government

40 Study the table below.

Slaves Imported into Charleston, South Carolina

Year	From African Ports	From Caribbean Ports	From North American Ports	From Other Locations
1773	7,246	553	40	6

Source: U.S. Census Bureau

The data in the table best demonstrates a result of

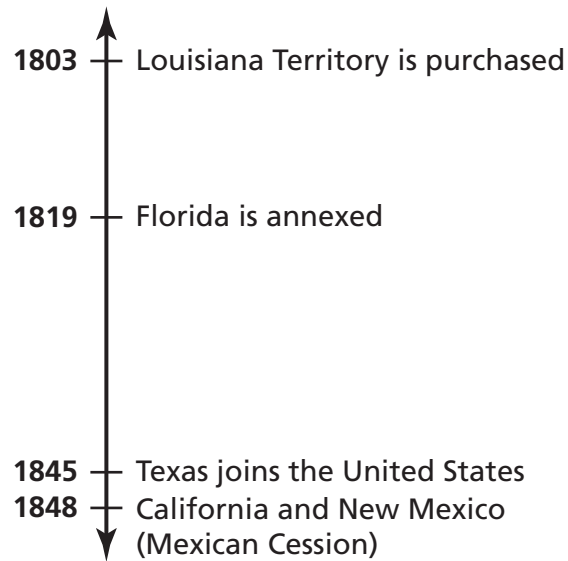
- F** Triangular Trade.
- G** the Trail of Tears.
- H** Manifest Destiny.
- J** the Northwest Ordinance.

41 Which event directly contributed to the beginning of the Revolutionary War?

- A** the rapid settlement of the Ohio River valley by British colonists
- B** the removal of Native Americans in the Southern colonies
- C** a proposed military alliance with the king of France
- D** an effort to tax British colonists without proper representation

42 Study the timeline below.

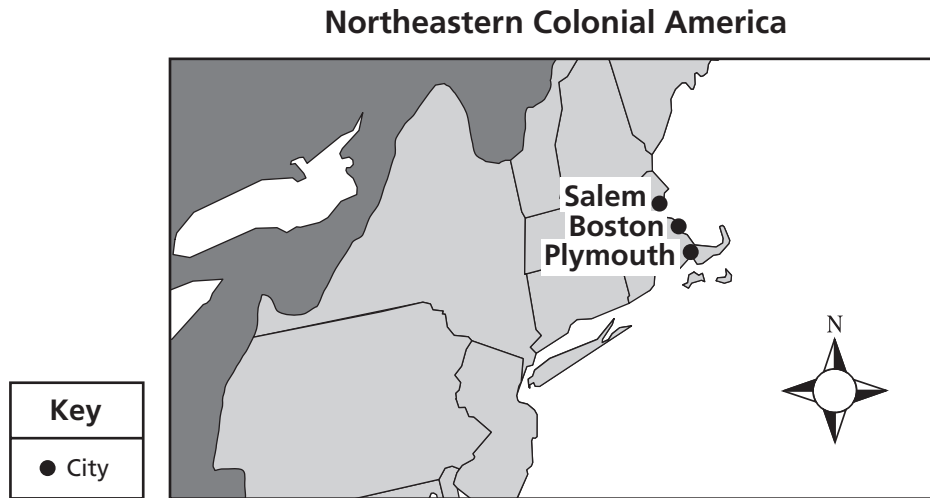
Territorial Growth of the United States, 1803 – 1848



Which trend in United States history is reflected by the events on the timeline?

- F** expansion of voting rights to American citizens
- G** increased restrictions on immigration to the United States
- H** expansion of the boundaries of the United States
- J** increased protection of the rights of Native Americans

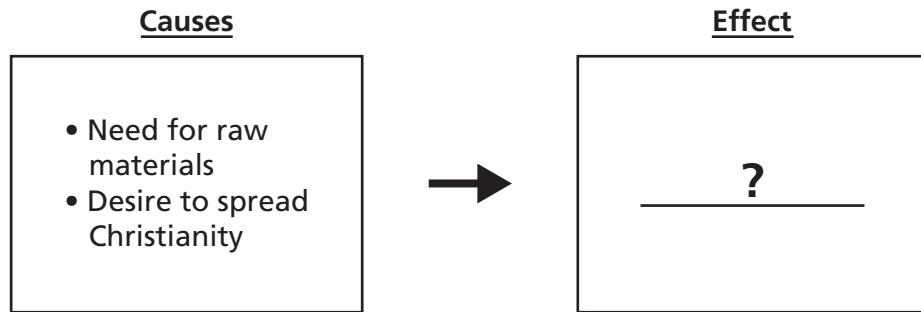
43 Study the map below.



The three cities shown on this map most likely relied on which industry during the colonial period?

- A** cotton production
- B** coal mining
- C** tobacco farming
- D** shipbuilding

44 Study the diagram below.



Which effect best completes the cause and effect diagram?

- F** European nations colonize North and South America.
- G** American colonies rebel against the British and Spanish.
- H** European nations experience civil wars.
- J** American colonies protest unfair taxes.

45 Study the table below.

Electoral Votes in the 1860 Presidential Election

Candidate	All States	Free States (18)	Slave States (15)
Lincoln	180	180	0
Opposition to Lincoln (Douglas, Breckinridge, and Bell)	123	3	120

Based on the table, which conclusion can be drawn regarding the 1860 presidential election?

- A** Lincoln's supporters were found in free and slave states.
- B** The free and slave states held differing political views.
- C** Lincoln's opponents rejected the institution of slavery.
- D** Free states had less political power than slave states.

46 Study the photograph below.

Rally in Washington, DC



The action in the photograph is protected by the Constitution as long as the protestors

- F** stay off the sidewalk.
- G** gather outside.
- H** meet on the weekend.
- J** obey the laws.

47 What is one way European settlements impacted the native population of North America?

- A** The English allowed the practice of indentured servitude.
- B** The explorers brought American foods to Europe.
- C** The English defeated the Spanish Armada.
- D** The Spanish mission system was established to spread Christianity.

Go On ►

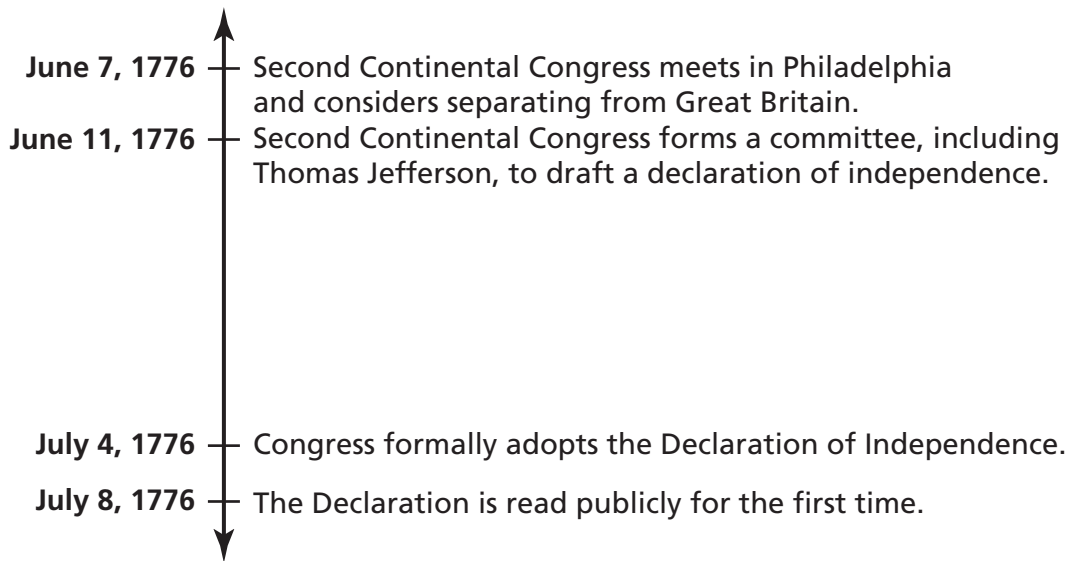
48 In 1999, a writer who wrote a book about Andrew Jackson created a

- F** primary source.
- G** personal journal.
- H** secondary source.
- J** government archive.

49 Which statement describes an example of a commercial economy?

- A** a baker trades his bread for a carpenter's furniture
- B** a weaver makes cloth for her children's clothes
- C** a store sells goods to make a profit
- D** a farmer harvests hay to feed horses

The Second Continental Congress



Based on the timeline, one goal of the Second Continental Congress was to

- F** change Great Britain's policy of mercantilism.
- G** avoid war with Great Britain at any cost.
- H** improve the public's opinion of Great Britain.
- J** end Great Britain's rule of the colonies.

51 Study the excerpt below.

I suggest for your consideration the propriety of setting apart an ample district west of the Mississippi, and without the limits of any State or Territory now formed, to be guaranteed to the Indian tribes as long as they shall occupy it. . . . There they may be secured in the enjoyment of governments of their own choice, subject to no other control from the United States than such as may be necessary to preserve peace on the frontier and between the several tribes.

— Andrew Jackson's First Annual Message to Congress, 1829

Based on the excerpt, which change caused by westward movement was discussed by President Jackson?

- A** the cultivation of tribal lands
- B** the education of Native Americans
- C** the relocation of Native Americans
- D** the dominance of certain tribes

52 Study the picture below.

The Cumberland Gap



Courtesy of Library of Congress #LC-USZ62-52628

Which two states experienced population growth because of the geographic feature pictured?

- F** Kentucky and Tennessee
- G** Maine and Ohio
- H** Florida and Alabama
- J** Georgia and Missouri

Go On ►

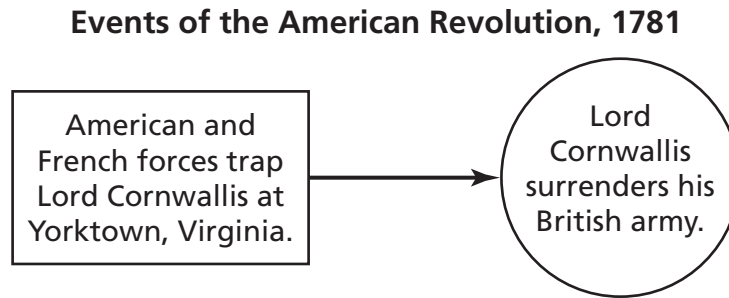
As population shall increase, and approach the Indian boundaries, [wild animals] will be diminished, and new may be made for small considerations It is however painful to consider that all the Indian Tribes once existing in those States, now the best cultivated and most populous, have become extinct. If the same causes continue, the same effects will happen, and in a Short period the idea of an Indian on this side of the Mississippi will only be found in the page of the historian.

— Henry Knox to George Washington,
July 7, 1789

The author of the excerpt would most likely argue that

- A** Native Americans should be given land along the East Coast.
- B** westward expansion was a threat to Native American tribes.
- C** military officials should forcibly relocate Native Americans.
- D** Native Americans should be given representation at the federal level.

54 Study the diagram below.



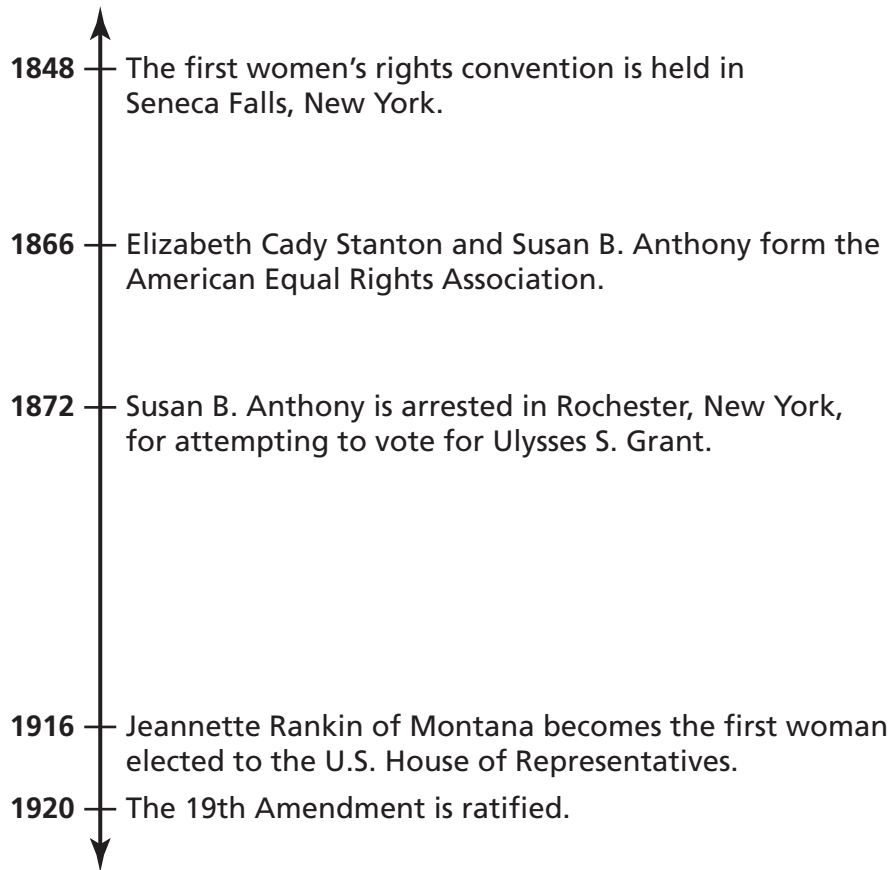
Which statement is best supported by the diagram?

- F** British generals had prior knowledge of the territory where battles occurred.
- G** Colonial merchants supplied both sides during the Revolutionary War.
- H** American troops were better equipped to deal with difficult conditions.
- J** Alliances were influential in bringing an end to the Revolutionary War.

55 The growth of industrialization and urbanization in early 19th-century New England was most affected by

- A** labor shortages due to declining immigration.
- B** the increasing development of large-scale plantations.
- C** laws regulating entrepreneurs and business expansion.
- D** the increasing demand for manufactured goods in other regions.

**The Women's Rights Movement
in the United States, 1848 – 1920**



Which goal was achieved because of the events listed in the timeline?

- F** establishment of prohibition
- G** female suffrage
- H** abolition of slavery
- J** child labor laws

57 Study the information below.

In 1776, Thomas Paine published a pamphlet titled *Common Sense*. It was widely read by American colonists and clearly explained Paine's view that the British government had abused its authority in the colonies.

Based on the information, what was the most likely purpose of Thomas Paine's *Common Sense*?

- A** to reduce the size of colonial militias
- B** to limit the authority of colonial governments
- C** to advocate for acceptance of Great Britain's tax policies
- D** to encourage American colonists to fight for independence

58 Study the chart below.

Urban Places in the United States, 1800

Place	Population
New York City, NY	60,515
Philadelphia, PA	41,220
Baltimore, MD	26,514
Boston town, MA	24,937
Charleston, SC	18,824
Northern Liberties township, PA	10,718
Southwark district, PA	9,621

Source: U.S. Census Bureau

According to the chart, which urban area had fewer residents than Charleston, SC?

- F** Baltimore, MD
- G** New York City, NY
- H** Southwark district, PA
- J** Boston town, MA

59 Which example describes a primary source?

- A** a research article written by a Civil War historian
- B** a letter written by a soldier during the Battle of Shiloh
- C** a museum timeline of reasons for the Civil War
- D** a map in a textbook showing the location of Fort Sumter

60 Study the information below.

In 1786 – 1787, a rebellion against the government took place in Massachusetts. Known as Shays’s Rebellion, this group seized several courthouses and attempted to seize the United States arsenal at Springfield. The federal government under the Articles of Confederation was unable to suppress the revolt, which was eventually ended by the Massachusetts state militia.

Based on the information, what was one impact of Shays’s Rebellion on the creation of the United States Constitution?

- F** The president was given the power to grant pardons.
- G** The power to control elections was given to the states.
- H** The power to maintain an army was given to Congress.
- J** The Supreme Court was given the power to declare laws illegal.

61 Which example best represents a traditional market activity in early America?

- A** a group of shipbuilders establishes a price for new ships
- B** two families trade surplus goods to prepare for the winter
- C** the only blacksmith in town raises the price of shoeing a horse
- D** a merchant sells products for less to compete with other suppliers

62 Study the information below.

Congress shall make no law . . . [reducing] the freedom of speech, or of the press; or the right of the people to peaceably assemble, and to petition the government [to resolve their complaints].

— First Amendment, United States Constitution

Based on the information, which action would violate the rights of a United States citizen?

- F** punishing an individual without a trial
- G** entering a suspect's home without a warrant
- H** quartering troops in a person's private home
- J** arresting someone for criticizing the president

63 Study the definition below.

n. — a set of practices and beliefs about the nature and purpose of the universe

Which word best matches the definition?

- A** ritual
- B** language
- C** religion
- D** government

64 Which is an example of a secondary source?

- F** the Constitution of the United States
- G** a magazine article on living in New York
- H** official records of United States Census
- J** an interview with President James Monroe

65 Study the excerpt below.

Colonies [fall apart surely] when the colonists imitate and embrace the habits, customs, and practices of the natives. There is no better way to remedy this evil than to do away with and destroy completely the habits and practices of the natives.

— Virginia Colony Promoter Sir William Herbert, 1610s

The excerpt states an example of

- A** Native Americans conforming to colonial traditions.
- B** prejudice against Native American customs.
- C** Native Americans discriminating against colonists.
- D** altruism benefiting Native Americans.

Go On ►

66 Study the bill below.

Guest Check			
Invoice Number: 0003201			
Qty.	Item	Price	
1	shirt		9.99
2	pants		15.00
		Subtotal	24.99
		Tax	2.25
		Total	27.24

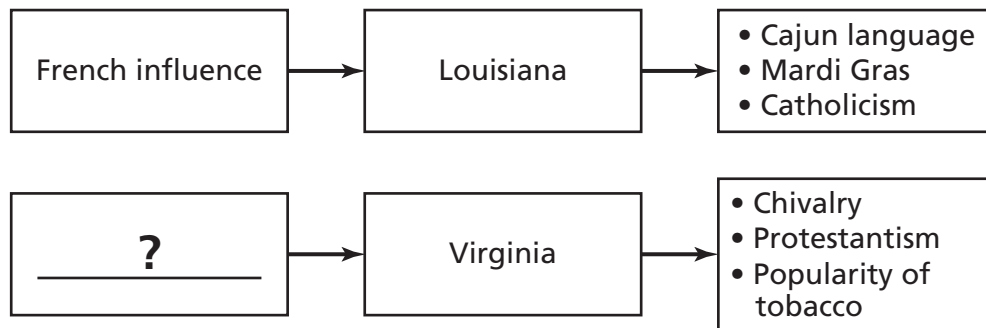
Which type of tax was added to the bill?

- F** income
- G** property
- H** export
- J** sales

67 Which phrase explains one purpose for dividing the United States government into three different branches?

- A** to reduce the number of elected representatives
- B** to encourage citizen participation in elections
- C** to prevent abuses of government authority
- D** to decrease the power of state governments

Study the diagram below.



Which phrase best completes the diagram?

- F** British influence
- G** German influence
- H** Native American influence
- J** African-American influence

69 Study the painting below.

**Surrender of General Lee at
Appomattox Court House, Virginia**



Courtesy of Library of Congress #LC-USZC2-3054

Which event occurred after the action depicted in the painting?

- A** the negotiation of the Missouri Compromise
- B** the enforcement of the Monroe Doctrine
- C** the Indian Removal Act
- D** the passage of the Reconstruction Acts

Reading and Language Arts Answer Key

1	C	22	G	43	C	64	H
2	J	23	B	44	H	65	C
3	A	24	J	45	A	66	F
4	J	25	D	46	H	67	D
5	A	26	F	47	A	68	H
6	G	27	B	48	J	69	B
7	D	28	F	49	A	70	G
8	G	29	C	50	F	71	A
9	B	30	F	51	C	72	G
10	H	31	C	52	J	73	B
11	B	32	J	53	A	74	J
12	H	33	B	54	H	75	A
13	C	34	F	55	A	76	G
14	F	35	A	56	G	77	D
15	C	36	H	57	D	78	F
16	F	37	B	58	F	79	C
17	B	38	H	59	C	80	F
18	H	39	D	60	H	81	C
19	D	40	F	61	B	82	G
20	H	41	B	62	J	83	D
21	D	42	J	63	B		

Mathematics Answer Key

1	C
2	F
3	D
4	H
5	B
6	G
7	C
8	J
9	D
10	F
11	B
12	J
13	A
14	G

15	D
16	H
17	B
18	J
19	C
20	H
21	D
22	H
23	A
24	H
25	B
26	J
27	A
28	G

29	B
30	H
31	B
32	J
33	C
34	J
35	A
36	F
37	B
38	G
39	A
40	F
41	C
42	G

43	D
44	G
45	A
46	J
47	B
48	J
49	D
50	F
51	D
52	H
53	A
54	H
55	A

Science Answer Key

1	D
2	H
3	C
4	H
5	A
6	G
7	D
8	H
9	B
10	H
11	C
12	J
13	D
14	G
15	C
16	J
17	A
18	H

19	B
20	G
21	C
22	F
23	A
24	H
25	C
26	J
27	C
28	F
29	D
30	J
31	A
32	F
33	C
34	F
35	C
36	J

37	B
38	F
39	D
40	F
41	B
42	F
43	B
44	F
45	A
46	F
47	C
48	J
49	C
50	G
51	B
52	G
53	D
54	G

55	C
56	J
57	B
58	H
59	B
60	G
61	A
62	J
63	B
64	J
65	B
66	J
67	B
68	F
69	B

Social Studies Answer Key

1	D
2	G
3	D
4	F
5	B
6	H
7	C
8	F
9	C
10	F
11	C
12	F
13	B
14	F
15	D
16	J
17	C
18	G

19	B
20	G
21	A
22	F
23	A
24	J
25	D
26	G
27	B
28	F
29	A
30	G
31	B
32	H
33	B
34	G
35	C
36	J

37	A
38	G
39	D
40	F
41	D
42	H
43	D
44	F
45	B
46	J
47	D
48	H
49	C
50	J
51	C
52	F
53	B
54	J

55	D
56	G
57	D
58	H
59	B
60	H
61	B
62	J
63	C
64	G
65	B
66	J
67	C
68	F
69	D



Tennessee Comprehensive Assessment Program
Achievement Test ~ Grade 8
Practice Test
Version B



TN00005430